



December 28, 2020

Kimberly Bose, Secretary  
Federal Energy Regulatory Commission  
888 First Street NE  
Washington, D.C. 20426

*Submitted electronically via: <https://ferconline.ferc.gov/FERCOnline.aspx>.*

**RE: NEPA Scoping Comments on the Proposed Goldendale Pumped Storage Project (P-14861-002).**

Dear Secretary Bose,

The following comments are submitted on behalf of Columbia Riverkeeper, Friends of the White Salmon River, and Washington Chapter of the Sierra Club (together “Commenters”) in response to the Federal Energy Regulatory Commission’s (FERC) request to assist the agency in identifying issues that must be addressed during the environmental review process. On October 29, 2020, FERC issued a Notice Soliciting Scoping Comments for the Goldendale Pumped Storage Project (FERC No. 14861-002) (hereinafter “Scoping Document”) pursuant to the National Environmental Policy Act (NEPA). 40 C.F.R. §§ 1500-1508. For reasons described below, this scoping process is premature and FERC must conduct an Environmental Impact Statement (EIS) for this development.

**I. Statement of Interest and Background on the Goldendale Pumped Storage Project.**

Riverkeeper is a 501(c)(3) non-profit organization whose mission is to protect and restore the water quality of the Columbia River and all life connected to it from the headwaters to the Pacific Ocean. The organization’s strategy for protecting the Columbia River and its tributaries includes working in river communities and enforcing laws that protect public health, salmon, and other fish and wildlife. Riverkeeper has been actively engaged in Rye Development (Rye), dba

Free Flow Power 101, LLC's proposed Goldendale Energy Storage Hydroelectric Project (Project) since 2017 and closely followed other pumped storage projects proposed in this area, the most recent iteration rejected by FERC in 2016. See Public Utility District No.1 of Klickitat County, Washington & Clean Power Development, LLC, 155 F.E.R.C. ¶ 61,056 (2016).

Commenters appreciate the opportunity to provide these comments and supporting materials, including the Appendices with this letter. Our expectation is that the relevant documents, included in with this comment, will also be included in the administrative record for this decision.

Rye proposes the Northwest's largest pumped storage hydroelectric project along the Columbia River in Klickitat County, Washington, near the John Day Dam, with transmission facilities extending into Sherman County, Oregon. The project would occupy 18.1 acres of land with a portion of the Project within an existing transmission right-of-way owned by the U.S. Army Corps of Engineers and administered by Bonneville Power Administration. The Project includes an off-stream, pumped-storage complex with: (1) a 61-acre upper reservoir formed by a 175-foot-high, 8,000-foot-long rockfill embankment dam at an elevation of 2,950 feet mean sea level (MSL) with a vertical concrete intake-outlet structure; and (2) a 63-acre lower reservoir formed by a 205-foot-high, 6,100-foot-long embankment at an elevation of 590 feet MSL with a horizontal concrete intake-outlet structure and vertical steel slide gates. See Scoping Document at 6. According to Rye, the Project consists of over 2,400 feet of maximum gross head that involve no river or stream impoundments, allowing for relatively small water conveyances. Other features include an underground water conveyance tunnel, underground powerhouse, 115 and 500 kilovolt transmission line(s), a substation/switchyard, and other appurtenant facilities. Goldendale Pumped Storage Project CWA 401 Certification Application at 1 (June 23, 2020).

Rye would site the Project's lower reservoir on lands that previously housed the CGA smelter (also known as Harvey Aluminum, Martin Marietta Aluminum, Commonwealth Aluminum, or Goldendale Aluminum), now a Resource Conservation and Recovery Act (RCRA) contaminated site, which include contaminated lands and groundwater. *Id.* at 2. The Project is expected to require 9,000 acre feet of Columbia River water for the initial fill and an additional 390 acre feet per year to offset evaporative losses. Goldendale Energy Storage Final FERC License Application, FERC Project No. 14862 (FLA) at 14.<sup>1</sup>

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<sup>1</sup> The numbers in Rye's FLA are higher than those in FERC's Scoping Document, which read: "The initial fill would require 7,640 acre-feet of water and would be completed in about six months at an average flow rate of approximately 21 cubic feet per second (cfs) (maximum flow rate available is 35 cfs). It is estimated that the project would need 360 acre-feet of water each year to replenish water lost through evaporation." Scoping Document 1 for the Goldendale Pumped Storage Project, FERC Project No. P-14861-002, at 7 (Oct. 29, 2020).

The Project threatens irreplaceable tribal cultural and religious resources, water quality, fish, and wildlife. The Project would permanently destroy large segments of unique waterbodies, including “waters of the United States,” in the scenic Columbia Hills and cause downstream impacts to perennial waterbodies. *See* Columbia Riverkeeper et. al, Public Comments on Free Flow Power 101, LLC Goldendale Pumped Storage Project Clean Water Act 401 Water Quality Certification, (Nov. 9, 2020) (Appendix 1). The Project requires withdrawing millions of gallons of Columbia River water, threatening designated uses and impacting water quality in an already degraded river. *Id.* Tribal, federal, and state fish and wildlife agencies have raised significant concerns about the Project’s impacts on water quality, fish, and wildlife. *Id.* All of these issues, discussed in greater detail below, must be addressed in FERC’s NEPA process.

Like many people in the Pacific Northwest and nationally, Riverkeeper is deeply concerned about a decision that will authorize the construction of a Project with such detrimental and unavoidable environmental justice concerns. At a time when our nation is supposedly reconciling with its deeply ingrained systemic racism, pushing forward an alleged “green-energy” project of this magnitude that will obliterate tribal cultural and religious resources; hinder, if not prohibit, tribal access; and continue the nation’s pattern of deep disregard for tribal cultural resources, is unacceptable. As the state of Washington sets de-carbonization goals, projects with such blatant disregard for environmental justice cannot be allowed a fast track through the licensing process. Green energy cannot be built on the backs of tribal nations.

## **II. FERC’s Application of the New CEQ Regulations is Premature.**

According to FERC’s Scoping Document, FERC intends to apply the Council of Environmental Quality (CEQ) new final rule, issued on July 15, 2020, revising the regulations under 40 C.F.R. §§ 1500-1508 that federal agencies use to implement NEPA (New CEQ Regulations). *See* Scoping Document at FN 3. The use of the new NEPA regulations is premature and not necessary for this project. FERC holds the authority to determine whether or not to apply the new CEQ Regulations to any ongoing activities begun before September 14, 2020, such as the Project. *See Update to the Regulations Implementing the Procedural Provisions of the National Environmental Policy Act*, 85 Fed. Reg. 43,304 § 1506.13. However, FERC has yet to issue publicly available guidance on how it intends to apply the New CEQ Regulations, making the application of the New CEQ Regulations in this process unnecessarily vague. FERC guidance on the New CEQ Regulations is necessary and extremely helpful in the NEPA review process because it allows stakeholders the opportunity to provide FERC with the information that FERC interprets as necessary and vital to the NEPA process. It also allows stakeholders insight into how FERC will apply the New CEQ Regulations and how that application is different or similar to FERC’s application of past CEQ Regulations. Without this new FERC guidance, stakeholders are in the dark when it comes to FERC’s application of the

New CEQ Regulations, making this NEPA process unnecessarily vague. The New CEQ Regulations do not automatically apply to the Project, which has been in the FERC docket since 2017. Given the lack of clarity set forth by FERC on how it plans to follow NEPA, application of the New CEQ Regulations is premature.

Furthermore, it is not practicable to begin scoping at this time for three reasons. First, as discussed above, FERC's push to use the New CEQ Regulations during this scoping process is premature. These new rules have not been in effect for more than six months and the current transition of Presidential administrations begs the question of whether these regulations will be in effect for the rest of the year. This Project commenced prior to these regulations and its NEPA scoping process should not proceed with the New CEQ Regulations. Given that the Project is not sufficiently developed at this time, it is impractical to begin scoping now and even more impractical to begin scoping under New CEQ regulations that are vague at best, and temporary at worst.

Second, the COVID-19 pandemic continues to devastate tribal governments, Indigenous people, and communities with a direct stake in the area where the project is proposed to be built. For example, the Yakama Nation Reservation and surrounding ceded lands have been devastated by the pandemic, with tribal resources and attention directed to relief response. In Yakima County, there have been 19,981 cases of COVID-19 reported and 310 deaths.<sup>2</sup> Under 40 C.F.R. § 1501.9(c), "As part of the scoping process the lead agency may hold a scoping meeting or meetings, publish scoping information, or use other means to communicate with those persons or agencies who may be interested or affected, which the agency may integrate with any other early planning meeting." For this process FERC decided that, "[d]ue to concerns with large gatherings related to COVID-19, we do not intend to conduct a public scoping meeting and site visit in this case." Scoping Document at 2. FERC offers no alternative to this public meeting, such as a virtual meeting for stakeholders. If COVID-19 proves enough of a concern to limit FERC's communications with the public on this Project, it also proves enough to make the scoping process impracticable at this time.

Third, the Project was recently bought by Copenhagen Infrastructure Partners (CIP), with Rye continuing to lead development of the Project until construction begins. Kelly Bork, COPENHAGEN INFRASTRUCTURE PARTNERS, *CIP acquires Swan Lake and Goldendale, 393 MW and 1,200 MW pumped storage hydro projects located in Oregon and Washington, USA*, (Nov. 11, 2020) (Appendix 2). So far this update has not been put into the FERC docket, nor has Rye informed Project stakeholders. It is unclear how this change of ownership will alter the Project or the environmental and energy issues at stake. It is further unclear how an environmental analysis can move forward when the Project's new owner and operator is not

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<sup>2</sup> View current Washington statistics here:  
<https://www.google.com/search?q=yakima+county+covid+19+cases&oq=Yakima+County+Covid&aqs=chrome.1.0l8.4503j0j7&sourceid=chrome&ie=UTF-8> (last visited Dec. 28, 2019).

involved in the FERC process. Any commitments made by Rye, at this point or until the start of construction, may not hold CIP accountable in the future. FERC must address how this change of ownership impacts the FERC licensing process and how CIP will be held accountable moving forward with Project construction.

### **III. Rye's Final License Application is Not Sufficiently Developed for Agency Consideration at This Time.**

The Project is not sufficiently developed for agency consideration at this time to allow for a thorough identification of significant and non-significant issues. Under 40 C.F.R. § 1501.9(a), “[s]coping may begin as soon as practicable after the proposal for action is sufficiently developed for agency consideration.” Several reasons exist as to why the Project is not sufficiently developed. Numerous archeological and cultural resource surveys of the area have yet to be conducted, finished, and filed with FERC.

First, the Confederated Tribes and Bands of the Yakama Nation (Yakama Nation), who have been actively involved in the project since 2017, and were contracted by Rye to conduct archaeological and cultural resource surveys of the area, have yet to conclude and submit the final cultural resource survey. Rye’s FLA states that “the APE (Area for Potential Effect) has been surveyed for archaeological and historic architectural resources, as well as TCPs (Traditional Cultural Properties) that are significant to the *Yakama Nation*. [emphasis added]. FLA Exhibit E at 78. But, the FLA goes on to list numerous cultural resource surveys that have yet to be finished by the Tribe including:

- Conducting additional survey to correct the boundary of the Push-Pum TCP so that it properly incorporates connected plant resources as documented in 1995 and 2019 (per the recommendation of Yakama Nation);
- Evaluating the Columbia Hills Multiple Property Documentation (MPD) TCP under NRHP Criterion B, C, and D (per the recommendation of Yakama Nation);
- Evaluating Sites 45KL566, 45KL567, 45KL570, 45KL744, 45KL746, and LS-3 for the NRHP both individually and for their contribution to the Push-Pum TCP, Columbia Hills MPD TCP, and Columbia Hills Archaeological District assessing Project effects to the Push-Pum TCP, Columbia Hills MPD TCP, the Columbia Hills Archaeological District.

FLA Exhibit E at 78.

Second, the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) have yet to conduct their cultural and archaeological surveys of the area, despite participating in the FERC process early.<sup>3</sup> Rye's FLA includes the following as surveys yet to conducted, including

- Identifying historic properties of religious and cultural significant to the Confederated Tribes of the Umatilla Indian Reservation (CTUIR);
- any identified historic properties of religious and cultural significance to the CTUIR, and any of the archaeological resources that are determined to be eligible for the NRHP.

FLA Exhibit E at 78.

Third, on October 16, 2020, the Nez Perce Tribe requested that Rye conduct an ethnographic study to identify any Nez Perce-specific resources in the Project area that could be affected by construction of the project, stating that because the Tribe did not know about the development they did not have the opportunity to submit study requests to determine detrimental impacts to their Tribe. Letter from Patrick Baird to FERC (Oct. 16, 2020), In FERC Docket No. 14861 & Telephone Memo from Suzanne Novak to FERC (Oct. 7, 2020), In FERC Docket No.14861. On October 29, 2020, FERC directed Rye to conduct that survey.

Lastly, it is unclear if Rye has contacted or been in sufficient contact with representatives from the Confederated Tribes of Warm Springs (Warm Springs) to allow the Tribe time to contribute surveys of the area if appropriate.

At this time, Yakama Nation, CTUIR, Nez Perce, and Warm Springs, the four Columbia River Treaty Tribes, have not been afforded the opportunity to identify tribal cultural and religious resources that risk destruction from the Project. Rye's FLA states, “[o]nly the Yakama Nation can determine what is significant to the tribe,” presumptively this suggests that Rye would agree that only CTUIR, Nez Perce, and Warm Springs can determine what is significant to their tribes. Conducting the scoping process now will undermine these surveys because without them it is near impossible that FERC will be able to identify all significant issues that the Yakama Nation, CTUIR, Nez Perce, and Warm Springs will raise.

#### **IV. An EIS is Required for the Project.**

##### **A. The National Environmental Policy Act.**

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<sup>3</sup> See Letter from Kristen Tiede to FERC (Jan. 21, 2018), In FERC Docket No. 14861. Letters submitted by CTUIR have been filed confidentially to protect tribal cultural resources.

Section 102(2)(C) of the National Environmental Policy Act establishes an “action-forcing” mechanism to ensure “that environmental concerns will be integrated into the very process of agency decisionmaking.” *Andrus v. Sierra Club*, 442 U.S. 347, 350 (1979). Pursuant to that statutory provision, “all agencies of the Federal Government shall … include in every recommendation or report on … major Federal actions significantly affecting the quality of the human environment, a detailed statement” known as an environmental impact statement (“EIS”) addressing “the environmental impact of the proposed action, any adverse environmental impacts which cannot be avoided …, alternatives to the proposed action,” and other environmental issues. 42 U.S.C. § 4332.

NEPA has two fundamental purposes: (1) to guarantee that agencies take a “hard look” at the consequences of their actions before the actions occur by ensuring that “the agency, in reaching its decision, will have available, and will carefully consider, detailed information concerning significant environmental impact,” *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989); and (2) to ensure that “the relevant information will be made available to the larger audience that may also play a role in both the decisionmaking process and the implementation of that decision,” *id.* at 349. NEPA “emphasize[s] the importance of coherent and comprehensive up-front environmental analysis to ensure informed decision making to the end that ‘the agency will not act on incomplete information, only to regret its decision after it is too late to correct.’” *Blue Mountains Biodiversity Project v. Blackwood*, 161 F.3d 1208, 1216 (9th Cir. 1998).

## **B. FERC Must Define the Proper Purpose and Need for the Project and Consider an Appropriate Range of Alternatives.**

The consideration of alternatives is the heart of the NEPA review process. It is through the identification of reasonable alternatives, the examination of the environmental impacts that will result under each alternative, and the comparison of those impacts, that the agency and the public can fully understand the impacts of a proposed project. As such, an agency may not undermine this process by defining a project's purpose so narrowly as to preclude consideration of reasonable alternatives. *Cf. Muckleshoot Indian Tribe v. U.S. Forest Service*, 177 F.3d 800, 814 n.7 (9th Cir. 1999).

### **1. The Purpose and Need.**

“The stated goal of a project necessarily dictates the range of reasonable alternatives and an agency cannot define its objectives in unreasonably narrow terms.” *Carmel by the Sea v. U.S. Dept. of Trans.*, 123 F.3d 1142, 1155 (9th Cir. 1997). Thus, the first step in the NEPA process is for the agency to “briefly specify the underlying purpose and need for the proposed action.” 40 C.F.R. § 1502.13. Here, the purpose and need must be based on the “the goals of the applicant and the agency’s authority.” *Id.*

According to Rye, the purpose of and need for this project is to assist Washington, Oregon, and California in meeting their “carbon reduction and environmental policy goals,” and specifically Washington’s goal of ensuring that “all of its electricity come from carbon-free sources by midcentury.” FLA at 2. Stated differently, Rye’s goal, and thus the “underlying purpose and need” for the project, is to “facilitate the transition to Washington’s clean energy future.” *Id.* at 3. Commenters agree this laudable goal is the true purpose of this project. As such, FERC must assess all reasonable alternatives that will support this goal. To do less would be to artificially restrict the purpose and need for this project to no other end than to prevent the consideration of reasonable alternatives.

Arguably, this project is limited to the development of “utility-scale storage to solve the operational challenges of integration.” *Id.* at 2. If FERC accepts this more limited purpose and need for this project, it must conduct an corresponding alternative analysis. Indeed, Rye admits that there are other “viable, least-cost energy storage options available,” in addition to its preferred pumped storage technology. *Id.* FERC is obligated to identify these alternatives and explore the relative environmental impacts of implementing these technologies to meet Washington’s goal of moving to all renewable electricity generation.

## **2. Reasonable Alternatives.**

NEPA requires federal agencies to “study, develop, and describe appropriate alternatives to recommended courses of action.” 42 U.S.C. § 4332(2)(E). This provision applies whether an agency is preparing an EIS or an EA. *Native Ecosystems Council v. US. Forest Serv.*, 428 F.3d 1233, 1245 (9th Cir. 2005). Viable alternatives are those that are feasible and either meet the stated goals of the project, or are reasonably related to the purposes of the project. First, as required by the law and to establish the baseline against which any environmental impact of any specific alternative can be compared, FERC must consider a no action alternative. Next, given Rye’s broadly stated project goal, FERC must consider alternatives that look well beyond the four corners of this specific project, to include alternatives that ensure Washington can meet its energy generation goals and to explore alternatives for utility-scale storage. In any case, FERC must identify and analyze reasonable alternatives to the specific proposed project. This analysis must examine alternative locations for this project and alternative designs at the chosen site.

### **i. No Action Alternative.**

FERC must define and explain impacts of not licensing this project, or any project, at this location. This the no action alternative. *See* 40 C.F.R. § 1501.7(e)(2) and § 1502.14(c). The NEPA regulations require the agency to “present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis

for choice among options by the decisionmaker and the public.” 40 C.F.R. § 1502.1. This description of the impacts of various alternatives, and the comparative analysis allowed by the development of such information, is the true benefit of the NEPA process. To be meaningful the NEPA document must include the information necessary to allow a thorough and objective assessment of the alternatives. To this end, the identification and review of a no action alternative is essential. Indeed, the no action alternative acts as the starting point for the comparison of the impacts, be they beneficial or adverse, of the proposal and reasonable alternatives.

Here, because this is a new project, the not action alternative is not permitting this project to go forward. Thus, FERC must describe the value of the site as it exists and the ecological, cultural, recreational, and commercial benefits and activities the site does and could support if the project is not developed.

## **ii. The EIS must consider clean energy alternatives.**

FERC must evaluate alternatives to the Project. Washington’s Deep Decarbonization Analysis does not call out the Project as necessary energy infrastructure to meet the state’s decarbonization goals. *See* Evolved Energy Research, Washington State Energy Strategy Decarbonization Demand and Supply Side Results (Aug. 2020) (Appendix 3). The state’s analysis is still underway and, to date, does not demonstrate a “need” for the Project. Even if large-scale pumped-storage hydroelectric power is called out as necessary to meet the state’s deep decarbonization goals, it is not clear Rye’s Project is necessary to meet that demand. For example, pumped storage at a different location could meet that need. Furthermore, Governor Inslee, a national climate leader, has not taken a position in favor of the Project. Rye’s FLA includes “Letters of Support”; Rye did not produce a letter of support from the Governor’s Office.

In considering alternatives, FERC must consult with the Governor’s Office, the Washington Department of Commerce, Ecology staff, and other experts on the state’s deep decarbonization efforts to verify if Rye’s alleged “benefits” pencil out.

Even if the Project would provide climate benefits, FERC must consider: (1) the lengthy permitting and construction timeline for pumped storage in general, (2) the added complexity for Rye’s Project due to scale of tribal cultural tribal resources, and (3) the need for the Project a decade or more in the future given the rapidly-changing and dynamic nature of energy markets.

According to a third-party economic analysis, the Project cannot provide renewable energy integration and replacement capacity to support regional decarbonization goals affordably and reliably. Anthony Jones, Critique of the Goldendale Energy Storage Hydroelectric Project, Notification of Intent (December 3, 2019)(Appendix 4). The Rocky Mountain Econometrics

analysis concludes that a combination of rising construction costs and decreasing open-market energy prices undercut Rye’s claims that the project is necessary to meet the state’s decarbonization goals. Overall, FERC must analyze alternatives to the Project, including alternative site locations, designs, and developments.

**iii. FERC must consider alternatives to pumped storage to provide utility-scale storage to solve the operational challenges of integration.**

In support of its application Rye claims that “[o]f the viable, least-cost energy storage options available, pumped storage is the best-proven, least-cost energy storage technology at scale.” This raises precisely the question FERC must answer: what other “viable, least-cost energy storage options” are available? The answer to this question must be found in FERC’s analysis of the reasonable alternative to the Project. In the FLA, Rye briefly analyzes wind, solar, and Lithium Ion batteries as potential green energy alternatives to pumped storage. FLA Exhibit C at 7. In comparing pumped storage to wind and solar energy, Rye quickly concludes that “[p]umped hydro storage is the only asset that provides large-scale, cost-effective renewable energy storage capacity and a range of essential grid reliability services, the value of which will increase as penetration of intermittent renewable resources rises.” FLA Exhibit C at 8. However, comparing renewable energy generation to storage is like comparing apples to oranges. Thus, Rye’s only adequate alternative analyzed is Lithium Ion batteries. That being said, FERC must include an analysis of Lithium Ion batteries as an alternative to pumped storage. In addition, there are several other renewable energy storage technologies that Rye’s FLA failed to analyze and that FERC must include in its analysis. These include, but are not limited to:

1. Stacked Blocks, which store energy by “automating a six-armed robotic crane to stack thousands of purpose-built, 35-metric-ton monoliths into a Babel-like tower and drop them down again...to release the power.” Julian Spector, GREEN TECH MEDIA, *The 5 Most Promising Long-Duration Storage Technologies Left Standing* (March 31, 2020). This technology adapted pumped hydro’s gravity storage in a format with more geographic diversity. *Id.*
2. Liquid Air, a mechanism that “cools down air and stores it in pressurized above-ground tanks.,” and uses them for grid storage. *Id.*
3. Underground Compressed Air, whereby you “use excess electricity to pump compressed air into a suitable underground formation that acts like a giant storage tank. Releasing the pressurized air allows the plant to re-generate electricity when needed.” *Id.*
4. Flow Batteries, particularly Avalon Batteries, which found a way around material cost challenges associated with flow batteries. *Id.*

**iv. FERC must analyze alternative sites for a pumped storage project.**

When the purpose of a project is not, but its own terms, tied to specific location, the agency must assess alternative locations for the project. *Ilio'ulaokalani Coal. v. Rumsfeld*, 464 F.3d 1083, 1098 (9th Cir. 2006). The history of tribal opposition to developments in this area and the extensively documented cultural resources should have made this location a non-starter for Rye. Despite this, the location alone does not represent the sole location for siting of this Project. The proliferation of proposed pumped storage projects on the West Coast alone demonstrates this. See *Generally Courtney Flatt, NORTHWEST PUBLIC BROADCASTING, New Energy Storage Project on Upper Columbia Brings Jobs — and Concerns from Colville Tribes* (Dec. 23, 2019), Julian Spector, GREEN TECH MEDIA, *Montana Developer Ready to Build Modern-Day Pumped Hydro Storage* (Aug. 13, 2019), Brian Gailey, Klamath Falls NEWS, *CIP Acquires Swan Lake pumped hydro project* (Nov. 11, 2020), Sammy Roth, LA TIMES, *Environmental Disaster or to a Clean Energy Future? A New Twist on Hydropower* (Mar. 5, 2020), Bloomberg News Editors, RENEWABLE ENERGY WORLD, *In quest for bigger batteries, California mulls pumped hydro* (Jun. 10, 2019). Furthermore, studies have undertaken “to develop a series of advanced Geographic Information System algorithms to locate prospective sites for off-river pumped hydro across a large land area such as a state or a country.” Bin Lu, et al., *Geographic information system algorithms to locate prospective sites for pumped hydro energy storage*, 222 APPLIED SCIENCE 300, (2018). The Project need not be built at this site and FERC must look at alternative sites for the Project.

#### **v. FERC must consider alternative project designs.**

Finally, FERC must explore alternatives to design and proposed operations of the facility as proposed. In its application Rye discusses its efforts to “evaluate the cost-benefit of various reservoir sizes.” FLA Exhibit A at 8. This analysis falls well short of what is required under NEPA. For example, Rye claims that it merely changed the size of the reservoirs, but retained “a total generating capacity of 1,200 megawatts (MW), which is considered most appropriate for the site and market conditions.” *Id.* Alternative generating capacities, and the resulting impact on the footprint of the Project must also be explored. Further, FERC must consider the locations of the reservoirs, and the potential alternatives for other locations within the property boundary. Moving the various elements of the facility within the Project site will likely change the on-the-ground impacts. These alternatives must be considered.

The same is true for the other equipment and infrastructure that will be needed to run the facility. FERC must consider and disclose the impacts for alternative designs and layouts.

In addition, FERC must consider the impact from alternative operational parameters for the project. According to Rye’s application, “The Project is designed to generate for 12 hours a day of full power generation, at a maximum of 1,200 MW and a minimum of 100 MW, and

pump water from the lower reservoir to the upper reservoir in about 15 hours.” FLA, Exhibit B at 6. In order for the Project to produce the maximum amount of energy (1,200MW), it will need to generate power (run all water from the upper reservoir to the lower) for 12 hours. FERC must require the development of alternative operational patterns and reveal and discuss the potential resulting impacts to the environment.

Finally, FERC must explore alternatives that mitigate the known adverse impacts that will result from the Project, as proposed. As discussed in detail below, the Project will have significant impacts on the environment, including but not limited to, direct, indirect, and reasonably foreseeable negative impacts to the people, fish, and wildlife in the vicinity of the proposed facility.

### **C. FERC Must Prepare an EIS for the Project because it will Significantly Affect the Quality of the Human Environment.**

FERC must prepare an EIS for the Project. “NEPA requires that agencies “prepare an EIS for federal actions that will ‘significantly affect the quality of the human environment.’”

*Columbia Riverkeeper v. United States Army Corp of Eng’rs*, 2020 U.S. Dist. LEXIS 219535, \*4 (W.D. Wa. Nov. 23, 2020) (quoting *Bark v. United States Forest Serv.*, 958 F.3d 865, 868 (9th Cir. 2020)(quoting *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Connaughton*, 752 F.3d 755, 763 (9th Cir. 2014)). Under 40 C.F.R § 1501.5(a), an Environmental Assessment (EA) is only appropriate, “for a proposed action that is not likely to have significant effects or when the significance of the effects is unknown.” Here, the Project will have

significant effects which are known. According to NEPA, “both the context and intensity of the action must be considered when an agency is considering whether a proposed action significantly affects the environment.” *Umpqua Watersheds v. United States Forest Serv.*, 725 F. Supp. 2d 1232, 1241 (OR Dist. Ct. 2010), *see* 40 C.F.R. § 1508.27. Context refers to the area of “the affected region, the affected interests and the locality.” 40 C.F.R. § 1508.27(a). “In evaluating intensity, the NEPA regulations require that an agency consider ten significance factors.” *Umpqua Watersheds*, 725 F.Supp. 2d at 1241. The factors include the following:

1. Impacts that may be both beneficial and adverse. A significant effect may exist even if the Federal agency believes that on balance the effect will be beneficial.
2. The degree to which the proposed action affects public health or safety.
3. Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas.
4. The degree to which the effects on the quality of the human environment are likely to be highly controversial.

5. The degree to which the possible effects on the human environment are highly uncertain or involve unique or unknown risks.
6. The degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration.
7. Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
8. The degree to which the action may adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources.
9. The degree to which the action may adversely affect an endangered or threatened species or its habitat that has been determined to be critical under the Endangered Species Act of 1973.
10. Whether the action threatens a violation of Federal, State, or local law or requirements imposed for the protection of the environment.

40 C.F.R. §§ 1508.27(b)(1)-(b)(10). Courts have stated that, “**If any** of these factors [are] present, an **EIS is required**,”[emphasis added] and have furthered explained that “Intensity “refers to the severity of the impact” and is evaluated based on a number of “significance” factors.” *Umpqua Watersheds*, 725 F.Supp. 2d at 1241, *Or. Natural Dessert Ass'n v. BLM*, 2014 U.S. Dist. LEXIS 143403, \*70 (Or. Dist. Ct. Mar. 17, 2014). But that “A court may find a substantial risk of a significant effect based on just one of these factors.” *Or. Natural Dessert Ass'n*, U.S. Dist. LEXIS 143403, \*70 citing *Ocean Advocates v. U.S. Army Corps of Eng'rs*, 402 F.3d 846, 865 (9th Cir. 2004). Several of these significance factors are present with this Project and therefore compel an EIS.

The intensity, or severity of the impacts from this Project are high, with several significance factors present. Given the extraordinary cultural and archeological resource issues at stake with the Project, limited and deficient information in the FLA<sup>4</sup>, the highly controversial nature of the Project, the Project’s obliteration of numerous sites eligible for inclusion in the National Register, and future implications, there is a substantial risk of significant effect on the human environment from this Project. Commenters urge that the Commission conduct an EIS. Section VI , below outlines the pertinent issues that FERC must analyze as part of its

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<sup>4</sup> See Letter from FERC to Erik Steimle (Dec. 17, 2020), In FERC Docket No. 14861 (stating that the request to use the Expedited Licensing Process is denied due to deficient information in the FLA and failure to provide information in response to FERC request.).

environmental review and support the Commission preparing an EIS for this Project because of the significant effects to the environment.

## **V. FERC is Legally Obligated to Evaluate Direct, Indirect, and Cumulative Impacts as part of the EIS.**

Under NEPA, an EIS must consider direct effects, indirect effects, and cumulative effects. “Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative.” 40 C.F.R. § 1508.8. The direct effects of an action are those effects “which are caused by the action and occur at the same time and place.” 40 C.F.R. § 1508.8(a). The indirect effects of an action are those effects “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 C.F.R. § 1508.8(b). For example, “[i]ndirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.” *Id.* These types of growth-inducing impacts must be analyzed, even when they are characterized as “secondary.” *City of Davis v. Coleman*, 521 F.2d 661, 676 (9th Cir. 1975) (requiring EIS to address growth-inducing impacts of freeway interchange planned in agricultural area on the edge of urban development). Section VI, below outlines the direct, indirect, and cumulative impacts that FERC must evaluate as part of the EIS.

## **VI. Specific and Pertinent Issues to Address in the NEPA Document.**

### **A. Tribal Archaeological and Cultural Resources.**

FERC must fully account for tribal nations’ input on Rye’s proposal in the EIS. Rye sited the Project in an area of incalculable significance for tribal nations, an area that includes multiple documented Traditional Cultural Properties (TCPs), tribal-access agreements, and TCP’s either: 1) eligible for inclusion on the National Historic Register of Historic Places (NHR); or 2) already included. Moreover, Rye has, for years, failed to change the Project’s location over the objections of sovereign tribal nations.

Yakama Nation has opposed the Project since its inception. Yakama Nation also opposed earlier iterations of a pumped-storage hydroelectric proposed at the site.

According to the Tribe, Rye’s development would destroy archeological, ceremonial, burial, petroglyph, monumental, and ancestral use sites—and cause significant harm to the Yakama way of life. Letter from Yakama Nation to Erik Steimle (Feb. 14, 2018), *In FERC*

Docket No. 14861. A Yakama Nation representative explained the Tribe's opposition at a Washington State Senate hearing in early 2020:

As you're aware, the Columbia River was dammed over the last century. In doing so, that impacted many of our rights, interests and resources. All of these things have been impacted: our fish sites, our villages, our burial sites up and down the river. This is another example of energy development, development in the West, that comes at a cost to the Yakama Nation.

Courtney Flatt, OPB, *Northwest Clean-Energy Advocates Eye Pumped Hydro to Fill Gaps, with Tribes Noting Concerns* (July 27 2020) (Appendix 5).

Rye has repeatedly misstated Yakama Nation's position on the Project, which has confused federal and state agencies, as well as public understanding of the Tribe's position. Yakama Nation in comment letters to FERC, has gone as far as to say that Rye is not operating in good faith. A letter submitted by Yakama Nation in February 2019 states:

The Yakama Nation does not believe that Rye Development conducted the pre-application in a good faith effort. This is the first time that the Yakama Nation has been afforded the opportunity to read any preliminary studies conducted by Rye Development. Nor were we aware that a draft Historic Properties Management Plan was being drafted as part of this document.

Confederated Tribes and Bands of the Yakama Nation, Comment to FERC, (Feb. 21, 2019), *In FERC Docket No. 1486.*

Yakama Nation's archaeological resource survey, completed in 2019, concluded that multiple sites of cultural and religious importance are located within the Project boundary.<sup>5</sup> According to Rye's FLA, "the proposed Project area is within a NRHP-eligible [National Register Historic Properties] TCP (Traditional Cultural Property) (Push-pum) and a NRHP-eligible Multiple Property Documentation TCP (Columbia Hills) and one Archaeological District (Columbia Hills District)." FLA Appendix G at 12. The FLA states:

The entire Columbia Hills and the archaeological sites contained within are significant to the understanding of how Yakama people lived and utilized the land. Information yielded from 'archaeological' resources is important to Yakama elders to determine what kinds of activities took place at a specific location. It also lends itself useful in identifying what kinds of resources are present.

FLA Exhibit E at 76. The proposed Project will also have a serious impact on the health and safety of the Yakama people, who use the Push-pum site to gather traditional medicines. Rye's

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<sup>5</sup> The Yakama Nation is still in the process of completing their 2020 Cultural Resources Survey of the Project area.

FLA states that, “[w]ithin that Project area, there is a stipulation for BPA to create a plan that will allow tribal members to access Push-pum to gather foods and medicine significant to the tribe.” FLA Exhibit E at 78. However, there is no discussion of how construction or management of the Project will interfere with this access or interfere with the integrity of the foods and medicines gathered.

The significance of this area to the Yakama Nation cannot be overlooked. While the Yakama Nation has filed tribal cultural resource surveys as “confidential” with FERC, available information, including FLA Appendix G, details the Project area’s importance for tribal cultural and religious resources.

The Yakama Nation is not the only affected Tribal Nation. CTUIR has also weighed in on the development. While letters submitted by CTUIR have been filed confidentially to protect tribal cultural resources,<sup>6</sup> the Tribe has publicly said that “the proposed undertaking is within a historic property of cultural and religious significance,” and are poised to conduct their own cultural resources survey of the area. On October 16, 2020, the Nez Perce Tribe requested that Rye conduct an ethnographic study to identify any Nez Perce-specific resources in the Project area that could be affected by construction of the project, stating that because the Tribe did not know about the development they did not have the opportunity to submit study requests to determine detrimental impacts to their Tribe. Letter from Patrick Baird to FERC (Oct. 16, 2020), *In FERC Docket No. 14861 & Telephone Memo from Suzanne Novak to FERC* (Oct. 7, 2020), *In FERC Docket No. 14861*. On October 29, 2020, FERC directed Rye to conduct that survey.

Both CTUIR and the Nez Perce Tribe have not been afforded the opportunity to identify tribal cultural and religious resources that may be impacted by the Project. *See infra* at Section III.

In addition to the cultural resources impacted within the Project footprint, Project construction and operation would impact off-site, adjacent tribal and non-tribal use of an irreplaceable cultural and historic treasure: an array of over 60 bear-paw petroglyphs on the basalt walls above the Columbia River. Located in the channel of the John Day Dam Lock, the petroglyphs are open to public viewing. Rye’s application fails to mention, let alone analyze, how Project construction and operations would impact the experience of tribal and non-tribal members who view and reflect on the renowned petroglyph collection.

When looking at the impacts to tribal cultural and religious resources from this Project the intensity, or severity of the impacts are high, with several significance factors present. Including the destruction of TCPs unique to this geographic location, the destruction of TCPs

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<sup>6</sup> See Appendix 6 and 7, for historical context surrounding the treatment of Indian remains and cultural property in the United States resulting in the need for tribes to file cultural resource information confidentially.

eligible for, or already included, on the NRH, the serious impacts to public health and safety of Indian people who rely on foods and medicines in the area, the cumulative impacts that the Project will have on archeological and cultural resources of at least four tribes, and the future implications that developing this Project will have on this site, including opening the area to more development. 40 C.F.R. § 1508.27(b)(2), (3), (4), (5), (6), (7), (8). The effects of this Project are highly controversial and must be analyzed by FERC in an EIS. *See generally, Umpqua Watersheds*, 725 F.Supp. 2d at 1241.

FERC must analyze how the Project's construction and cultural resource destruction, cumulatively impacts the Yakama Nation, CTUIR, Nez Perce, and Warm Springs and must look at these impacts in conjunction with and through the lens of government sanctioned cultural genocide that has impacted these tribes and threatened their life ways. FERC's EIS analysis must not and cannot take the Project's destruction of archaeological and cultural resources out of the context of history, otherwise the cumulative and future impacts of the Project will evade analysis. *See infra* at Section IV.C.

## **B. Water Quality Issues.**

The Project would permanently destroy large segments of unique waterbodies, including "waters of the United States" and "waters of the state" in the scenic Columbia Hills. The Project would also cause downstream impacts to perennial waterbodies. The Project requires withdrawing millions of gallons of Columbia River water, threatening designated uses and impacting water quality in an already degraded river. Columbia Riverkeeper and other commenters submitted detailed technical comments to the Washington Department of Ecology on Rye's 401 water quality certification application, which outline in great detail the water quality issues from the Project and are incorporated herein by reference. *See Columbia Riverkeeper et. al, Public Comments on Free Flow Power 101, LLC Goldendale Pumped Storage Project Clean Water Act 401 Water Quality Certification, (Nov. 9, 2020) (Appendix 1).* FERC must analyze the water quality issues identified in Columbia Riverkeeper et al.'s 401 certification comments in the EIS.

## **C. Avian, Terrestrial, and Aquatic Wildlife Impacts.**

The Project will have significant impacts on wildlife. On March 10, 2020, comments to FERC, the Washington Department of Fish and Wildlife (WDFW) noted: "We disagree with the applicant's opinion that the habitat near the upper reservoir is not unique or uncommon. The uniqueness of this habitat is linked to the close proximity to golden eagle and prairie falcon nesting habitat." Comments by WDFW and the U.S. Fish and Wildlife Service (USFWS) detail the Project's impacts to wildlife, including increased mortality of bats and raptors by nearby wind turbines, and wildlife habitat. WDFW Comment to FERC, (Mar. 10, 2020), *In FERC Docket No. 14861; USFWS Comment to FERC (Mar. 3, 2020), In FERC Docket No. 14861.*

Furthermore, the Oregon Department of Fish and Wildlife (ODFW) and Washington Department of Fish and Wildlife (WDFW) collectively identified four threatened, endangered, candidate, or proposed species, as well as one critical habitat within the project boundary.<sup>7</sup> See Letter from U.S. Dep’t of Interior Fish & Wildlife Service to FERC (Oct. 14, 2020), *In FERC Docket No. 14861*. Rye elected to site its Project adjacent to and, in the case of the upper reservoir, within a wind turbine complex. In multiple comments to FERC, USFWS and WDFW describe how building large reservoirs will attract birds—including threatened, sensitive, and candidate species—and, in turn, increase birds killed by the wind turbine complex. USFWS explains:

As recently as January 2020, a golden eagle wind turbine strike mortality occurred southwest of the proposed Project (Figure 1). Five additional golden eagle mortalities have been documented to the northeast of the proposed Project. Two golden eagle nests also occur within close proximity to the proposed Project. This history of mortalities shows a landscape already compromised by wind power infrastructure. Currently golden eagles appear to have a difficult time navigating the wind currents affected by existing wind power infrastructure near the project area. The potential of the proposed Project to further the remaining laminar wind currents lends credence that resulting impacts to avian species would not be exclusive to wind power production in the area.

USFWS Comment to FERC (Mar. 3, 2020), *In FERC Docket No. 14861*. USFWS also notes that radio telemetry data collected in 2007 for eight months “indicates significant use of the entire project area” by golden eagles. *Id.* at 2. USFWS explains: “Since prey availability is a primary factor in governing habitat selection of golden eagles . . . the habit in the area of the proposed upper reservoir is a determining factor in golden eagle nesting preference for the area.” *Id.* at 2 - 3 (internal citations omitted). The Project also threatens bats. WDFW notes:

The construction of a new body of water at the upper reservoir, will likely provide habitat for and attract insects in close proximity to wind turbines. In turn the insect[s] will attract foraging bats to the area, putting them in close proximity to the wind turbines. Bats are also attracted to water features to drink from. Bat fatalities have been found to be caused by wind turbine blade strikes and bats flying close to the turbine blades in an effort to avoid them resulting in barotrauma. There are no available bat survey data specific to the Project upper reservoir site. Bats are known to have a long life span and slow reproductive rate. Loss of large numbers of bats may have significant impacts to local or regional populations.

WDFW, Comment to FERC, (Mar. 10, 2020), *In FERC Docket No. 14861*. USFWS and WDFW comments detail the direct and indirect wildlife-habitat impacts from the Project’s infrastructure,

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<sup>7</sup> ODFW and WDFW collectively identified the following species: 1. The Western Distinct Population Segment of Gray Wolf; 2. Gray Wolf; 3. Yellow-Billed Cuckoo; and 4. Bull Trout. WDFW also identified Bull Trout critical habitat as within the project boundary.

and how the Project’s location, adjacent to a large wind turbine complex, will harm threatened, sensitive, or candidate species. Both WDFW and USFWS provided detailed recommendations for the Project’s Draft License Application compensatory wildlife mitigation plan. To date, Rye has yet to produce a mitigation plan that incorporates key agency recommendations. *See* FLA Appendix D, *Wildlife Mitigation Plan* (June 2020).

FERC’s EIS must address the Project’s impacts on wildlife, including the loss of habitat as a result of the new development, the future implications of siting a large scale development here on wildlife, the increase in avian mortality from wind turbines as a result of increased avian activity next to reservoirs, and the impacts to threatened, endangered, candidate, and/or proposed species.

#### **D. Wind Turbines near Proposed Project.**

Rye chose to site the upper reservoir within and directly adjacent to an existing wind turbine complex. FLA Exhibit E at 5 (Figure 2.1-1A). The upper reservoir and the 62-wind-turbine complex, are located on land that is leased by the Tuolumne Wind Project Authority (TWPA) and contains TWPA’s wind turbines, which TWPA uses to supply energy and capacity to the Turlock Irrigation District (TID). TID is an irrigation district organized under the laws of the State of California (California Water Code §§ 20500-29978) and supplies electric power and energy to the residents and businesses within its service area. *See* Turlock Irrigation District, Comment to FERC, (Mar. 11, 2020), *In* FERC Docket No. 14861. TID raised five concerns regarding the Project. Specifically, TID raised concerns that the Project would: (1) redirect the wind used by the turbines, which would reduce their energy output; (2) increase wind turbidity, which would reduce their energy output and increase wear and tear on the turbines; (3) saturate and thereby weaken the foundations of some of the turbines; (4) increase the wildlife around the turbines, which will increase animal strikes and interfere with TWPA’s operations and output; and (5) interfere with the operations of the turbines’ underground power lines when constructing the Project’s underground components. *Id.* at 2–3. The concerns raised by TID must be analyzed by FERC in their environmental review because they involve unique risks on the environment in this geographic location. *See* 40 C.F.R. § 1508.27(b)(5).

Furthermore, Rye has failed to provide adequate information in response to Commission staff’s request for more information following Rye’s deficient FLA. Specifically, FERC states that,

In order to assess the compatibility of the proposed project with existing land uses and the potential indirect effects of the proposed project on the golden eagle, staff requested in comments on the draft license application, that you conduct studies (e.g., modeling) to demonstrate how project construction and operation would influence air flow above the upper

reservoir and around the wind turbines and how it would affect wind turbine operation and generation and include the modeling results in the final license application.

Without elaboration, in the final license application, you acknowledge the potential influence of the project on wind turbine performance and wind flow, but state that a thorough analysis can only be performed during final project design.

Letter from FERC to Erik Steimle, (Jul. 23, 2020), *In FERC Docket No. 14861*. In a December 17, 2020 letter from FERC, the Commission denied Rye's request to use the Expedited Licensing Process because of the information deficiencies in the FLA, stating that “[b]ased on staff’s analysis, FFP’s November 20, 2020 and December 4, 2020 filings only partially address staff’s July 23, 2020 and October 29, 2020 information requests.” *Id.* at 12. One such filing was Rye’s wind analysis, which it committed to expand by February 2021. *Id.* The results of this wind analysis must be analyzed by FERC because the presence of the wind turbines create and involve unique risks if this Project is implemented, including risks that would impact wildlife.

#### **E. Aluminum Smelter Cleanup Site**

According to the Scoping Document,

Portions of the project’s proposed infrastructure (such as the proposed lower reservoir) would be located on the site of the former Columbia River Gorge Aluminum (CGA) Smelter, which is now a Resource Conservation and Recovery Act (RCRA) contaminated site that is currently owned by NSC Smelter, LLC, and is subject to ongoing management and clean-up by Washington Department of Ecology (Washington DOE).

Scoping Document at 1. Previously proposed pumped storage projects in the area have been denied licenses by FERC because of the ongoing cleanup activities associated with CGA RCRA cleanup. *See Public Utility District No. 1 of Klickitat County, Washington, Clean Power Development, LLC*, 155 F.E.R.C. ¶ 61,056 (2016). Rye’s FLA states that,

The impoundment has tested as having non-hazardous and non-dangerous material; however, this area will be characterized further prior to being excavated as part of the construction of the lower reservoir. Because the material is unsuitable fill, it will be excavated and properly disposed of pursuant to full characterization in collaboration with the Washington Department of Ecology.

It is concerning that Rye has not completed characterization of this area as part of the FLA, nor has the developer created a plan for dealing with the material excavated during construction, if further characterization conflicts with prior testing. If material is excavated during construction and tests as being hazardous or dangerous waste, Rye must have a plan in place for properly disposing of that material in accordance with state and federal law. That being said, FERC must include an analysis of the status of CGA as part of its environmental review, particularly focusing on any incremental benefits to cleanup that may occur from Project construction and adverse significant effects. 40 C.F.R. § 1508.27(b)(1). Additionally, FERC must analyze whether or not Project construction activities may threaten a violation of State, Federal, or local law in regards to ongoing cleanup of the CGA RCRA site. 40 C.F.R. § 1508.27(b)(10). Both of these are significant factors that FERC must consider and further support the Commission conducting an EIS for this Project.

#### **F. Other Issues to Evaluate in the EIS**

FERC must also examine the following issues in the EIS:

- The Project’s environmental justice impacts, including the Project’s direct, indirect and cumulative impacts to Tribal Nations and Indigenous people, described above, and low-income ratepayers.
- The Project’s scenic and other aesthetic impacts, including the aesthetic impacts of additional transmission lines.
- The direct, indirect, and cumulative impacts of additional transmission lines in the Columbia Basin and in the Project vicinity.
- The Project’s impacts on the reliability and capacity of the BPA transmission lines and the Northwest grid.
- The Project’s construction and operational impacts on air quality and noise.
- The Project’s post-operation site restoration plans, including enforceable funding requirements to ensure those plans are completed.
- The Project’s impacts on the Columbia River in the event of a reservoir failure.
- The Project’s impacts on recreation, including paragliding, fishing, boating, birdwatching, petroglyph viewing, hunting, hiking, windsurfing, kiteboarding, kayaking, and other forms of recreation.
- The Project’s construction and post-construction traffic impacts.
- The Project’s socioeconomic impacts, including impacts to ratepayers.

#### **VII. Conclusion.**

Commenters respectfully reiterate that, for reasons described above, the scoping process is premature at this time. If FERC proceeds with the NEPA review, FERC must conduct an EIS

for this development because the Project will significantly affect the quality of the human environment. Commenters identify pertinent issues that FERC must address in its environmental review and which emphasize that the intensity of this project, i.e. the severity of the impact, is extremely high, destroying irreplaceable tribal cultural and religious resources and archeological sites, infringing on tribal peoples' access to food and medicine gathered in the area, impeding access to culturally significant areas, and impacting water quality and wildlife. The severity of impacts from this Project necessitate an EIS and Commenters respectfully request that FERC conduct an EIS on this highly controversial Project.

Sincerely,



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Margie Van Cleve  
Sierra Club - Washington State Conservation Chair

## **Appendix 1**

**Public Comments on Free Flow Power 101, LLC Goldendale Pumped  
Storage Project Clean Water Act 401 Water Quality Certification  
(FERC No. 14861)**

**Submitted on behalf of:  
Columbia Riverkeeper  
Washington State Chapter of the Sierra Club  
American Rivers  
Washington Environmental Council**

**November 9, 2020**

November 9, 2020

Director Laura Watson  
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*Submitted via email*

**RE: Public Comments on Free Flow Power (FFP) 101, LLC Goldendale  
Pumped Storage Project 401 water quality certification, .**

Dear Director Watson, Deputy Director Bartlett, Mr. McGowan, and Ms. Zimmerman,

Rye Development (Rye), dba Free Flow Power 101, LLC, proposes the Northwest's largest pumped storage hydroelectric project along the Columbia River in Klickitat County, Washington, near the John Day Dam. The Goldendale Energy Storage Hydroelectric Project (Project) threatens irreplaceable tribal cultural and religious resources, water quality, fish, and wildlife. The Project would permanently destroy large segments of unique waterbodies, including "waters of the United States," in the scenic Columbia Hills and cause downstream impacts to perennial waterbodies. The Project requires withdrawing millions of gallons of Columbia River water, threatening designated uses and impacting water quality in an already degraded river. Tribal, federal, and state fish and wildlife agencies have raised significant concerns about the Project's impacts on water quality, fish, and wildlife. Those concerns are summarized below and in exhibits. Due to the relatively early phase of FERC review, Rye is many months, if not years, away from producing studies and endeavoring to respond to the significant concerns raised.

Columbia Riverkeeper, the Washington State Chapter of the Sierra Club, American Rivers, and the Washington Environmental Council (collectively Commenters) urge the Washington Department of Ecology (Ecology) to deny Rye's proposed Clean Water Act (CWA) 401 water quality certification. Ecology should deny the certification

because: (1) the application is incomplete, and (2) Rye’s application fails to demonstrate the Project complies with water quality standards, including numeric and narrative standards, designated use protections, and the state’s Tier II Antidegradation Policy review. Based on the impacts of Rye’s “discharges” to “waters of the United States,” Ecology must deny Rye’s 401 certification regardless of whether the court-challenged 2020 U.S. Environmental Protection Agency (EPA) CWA 401 rules (hereafter 2020 401 rules), 85 Fed. Reg. 42,210 (July 13, 2020), remain in effect at the time Ecology acts on the 401 application. Due to the uncertain future of the 2020 401 rules, this comment details why Ecology must deny Rye’s 401 certification under both the 2020 and pre-2020 401 certification rules and legal precedent (hereafter pre-2020 401 rules).

## I. OVERVIEW OF THE PROJECT

The Project includes an off-stream, pumped-storage complex with an upper and lower reservoir. According to Rye, the Project consists of over 2,400 feet of maximum gross head that involve no river or stream impoundments, allowing for relatively small water conveyances. Other features include an underground water conveyance tunnel, underground powerhouse, 115 and 500 kilovolt transmission line(s), a substation/switchyard, and other appurtenant facilities. See Goldendale Pumped Storage Project CWA 401 Certification Application at 1 (June 23, 2020). Rye would site the Project’s lower reservoir on lands that previously housed the CGA smelter (also known as Harvey Aluminum, Martin Marietta Aluminum, Commonwealth Aluminum, or Goldendale Aluminum), including contaminated lands and groundwater. *Id.* at 2.

The Project is expected to require 9,000 acre feet of Columbia River water for the initial fill and an additional 390 acre feet per year to offset evaporative losses. Goldendale Energy Storage Final FERC License Application, FERC Project No. 14862 (FLA) at 14.

To construct and operate the reservoirs, the Project would impact ephemeral streams, ponds, intermittent streams, and a seep. Rye’s consultant, ERM, “delineated two ephemeral streams, two ponds, one intermittent stream and one seep within the study area (Figure 4-1).” FLA Appendix B at 10. Rye’s FERC application states:

Based on the observations . . . from field investigations conducted in May 2019, ERM identified one wetland and six waterbodies existing within the study area. Two of the six waterbodies within the study area, S7 and S8 are likely jurisdictional waters of the U.S. as they connect to perennial streams

downstream of the project area and therefore are subject to regulation under Section 404 of the federal Clean Water Act. The remaining four waterbodies and one wetland are likely not jurisdictional waters of the U.S because they appear to be isolated and do not connect to the Columbia River.

FLA Appendix B at 14. The FLA describes how construction and creation of the reservoirs would impact the “waters of the United States” (WOTUS) and non-federal jurisdictional waters.

Construction of the upper reservoir will permanently impact approximately 890 linear feet of stream S7, 75 linear feet of stream S8, and the entirety of pond P2 (0.03 acre). An additional 800 linear feet of stream S8 will be temporarily impacted through construction of the temporary construction laydown area.

FLA Exhibit E at 13. The FLA, Exhibit E, also describes direct impacts to what Rye calls “non-jurisdictional” waters, referring to non-federal jurisdictional waters. The FLA and 401 application do not address the legal definition of “water of the state” and analyze state jurisdiction, an analysis relevant under the pre-2020 401 rules.

Rye chose to site the upper reservoir within and directly adjacent to an existing wind turbine complex. *Id.* at 5 (Figure 2.1-1A). The upper reservoir and the 62-wind-turbine complex, are located on land that is leased by the Tuolumne Wind Project Authority (TWPA) and contains TWPA’s wind turbines, which TWPA uses to supply energy and capacity to the Turlock Irrigation District (TID). TID is an irrigation district organized under the laws of the State of California (California Water Code §§ 20500-29978) and supplies electric power and energy to the residents and businesses within its service area. See Turlock Irrigation District, Comment to FERC, (Mar. 11, 2020), *In* FERC Docket No. 1486 (Exhibit 6). TID raised five concerns regarding the Project. Specifically, TID raised concerns that the Project would: (1) redirect the wind used by the turbines, which would reduce their energy output; (2) increase wind turbidity, which would reduce their energy output and increase wear and tear on the turbines; (3) saturate and thereby weaken the foundations of some of the turbines; (4) increase the wildlife around the turbines, which will increase animal strikes and interfere with TWPA’s operations and output; and (5) interfere with the operations of the turbines’ underground power lines when constructing the Project’s underground components. *Id.* at 2–3. The concerns raised by TID are relevant to Ecology 401 certification review, which is discussed in greater detail below.

According to Rye, “[t]he Project is not expected to cause any impacts to water quality within or adjacent to the Project area, including to intermittent streams or the Columbia River.” *Id.* at 3. Rye does not propose any water quality mitigation.

Rye’s conclusion on water quality impacts is unfounded and does not align with the administrative record. For the reasons explained below, Rye fails to demonstrate the Project, and associated discharges to federal- and state-jurisdictional waters, will comply with water quality standards.

## **II. SUMMARY OF ECOLOGY’S AUTHORITY TO DENY RYE’S 401 CERTIFICATION**

Under § 401(a) of the CWA, “[a]ny applicant for a Federal license or permit to conduct any activity . . . which may result in any discharge into the navigable water[s] shall provide the licensing or permitting agency a certification from the State in which the discharge originates . . .” 33 U.S.C. § 401(a)(1). A state’s § 401 power to deny or condition federal environmental permits allows a state to influence—or simply veto—certain federal activities. See, e.g., *PUD No. 1 of Jefferson County v. Washington Dept. of Ecology*, 511 U.S. 700, 712 (1994) (holding that states have authority to restrict federal activity pursuant to § 401(d)); *S.D. Warren Co. v. Maine Bd. of Environmental Protection*, 547 U.S. 370 (2006) (noting that states have the “primary responsibilities and rights . . . to prevent, reduce, and eliminate pollution.”).

The purpose of § 401 is to give states a measure of control over federally permitted projects within their jurisdiction that may harm water quality. *S.D. Warren Co.*, 547 U.S. at 380 (citing S. Rep. No. 92-414, p. 69 (1971) (provision must have “a broad reach” if it is to realize the Senate’s goal: to give states the authority to “deny a permit and thereby prevent a Federal license or permit from issuing to a discharge within such State.”). Because the Rye’s project will discharge into waters of the United States, it requires a permit from FERC, and such permit cannot be issued without the required water quality certification from Ecology. See *City of Fredericksburg v. FERC*, 876 F.2d 1109, 113 (4th Cir. 1989).

Under U.S. Supreme Court precedent, arising in a case argued by Ecology, § 401 authority is broad, and it allows a state agency to condition or deny a project based on *any* adverse impact to water quality—not just the discharge that triggers § 401 oversight. *PUD No. 1*, 511 U.S. at 710-13 (“[O]nce the threshold condition, the

existence of a discharge, is satisfied . . . the certifying state or tribe may consider and impose conditions on the project activity in general, and not merely on the discharge, if necessary to assure compliance with the CWA *and any other appropriate requirement of state or tribal laws*"). The *PUD No. 1* holding also confirms that § 401 authority may be used to prevent or mitigate violations of *all* the elements of state water quality standards—not just numeric criteria. 511 U.S. 700 at 714-15.

Washington has adopted water quality standards to protect “public health and public enjoyment of the waters and the propagation and protection of fish, shellfish, and wildlife.” WAC 173-201A-010(1). Surface waters are protected by “numeric and narrative criteria, designated uses, and an antidegradation policy.” *Id.* “Surface waters of the state include lakes, rivers, ponds, streams, inland waters, saltwaters, wetlands, and all other surface waters and water courses within the jurisdiction of the state of Washington.” WAC 173-201A-010(2).

Ecology’s water quality certifications are issued as administrative orders under Washington State’s Water Pollution Control Act, 90.48 RCW. The goal of the act is to:

maintain the highest possible standards to insure the purity of all waters of the state consistent with public health and public enjoyment; the propagation and protection of wild life, birds, game, fish and other aquatic life; and the industrial development of the state. And to that end requires the use of all known available and reasonable methods by industries and others to prevent and control the pollution of the waters of the state of Washington.

In addition to the state’s Water Pollution Control Act, anyone who wishes to divert or store surface waters must get a water right permit from the state. According to Ecology’s *Water Quality Certifications for Existing Hydropower Dams* manual, “flow may still be regulated under other authorities like the CWA Water Quality Certifications and CZM [Coastal Zone Management] Act.” See *Water Quality Certifications for Existing Hydropower Dams* at 6. Moreover, while a hydropower project requires a state permit that is subject to SEPA (e.g., a water right or shoreline permit), the entire project, even the 401 Certification, which would be exempt, is subject to SEPA. *Id.* at 7.

On July 13, 2020, the U.S. Environmental Protection Agency (EPA) published a final rule revising the regulations implementing Section 401. Clean Water Act Section 401 Certification Rule, 85 Fed. Reg. 42,210 (July 13, 2020). As Ecology explained in comments on the draft rule, among the many flaws in the Final Rule, the EPA unlawfully

narrows the applicability of Section 401; circumscribes the scope of review of the certifying state or tribe; limits the information on the proposed federal project made available to states, tribes, and the public to inform the certification determination; restricts the conditions the state or tribe may impose to ensure state or tribal laws are met; and empowers the federal licensing or permitting agency to effectively overrule a state or tribal determination of whether such laws are met. Letter, M. Bellon, Director, Ecology to A. Wheeler, EPA, re: EPA's Proposed Rule, Updating Regulations on Water Quality Certification (Docket ID No. EPA-HQ-OW-2019-0405) (Oct. 21, 2019).

On July 21, 2020, the State of Washington, along with other states, challenged EPA's regulations as unlawful. The states' complaint alleged that the regulations are inconsistent with the CWA and EPA acted arbitrarily and capriciously when promulgated the rules. In addition, and importantly, the states also specifically challenged EPA's authority to promulgate regulations controlling the scope and process of a state's review under section 401 of the CWA. The states argue that section 401 does not grant EPA any rulemaking authority for procedures and responsibilities expressly reserved for states, and section 501(a) of the CWA limits EPA to prescribing "such regulations as are necessary to carry out [the Administrator's] functions under [the] Act." 33 U.S.C. § 1361.

Ecology may decide to limit its analysis to conform with EPA's new regulations. It could do this in two situations. First, Ecology may conclude it must acquiesce to the unlawful limits and conditions imposed by EPA's regulations and apply those regulations until they are vacated and set aside by EPA or a court. For the reasons described below, even under the 2020 401 rules, Ecology retains authority to deny Rye's 401 certification. Second, before it issues a decision in this matter, in order to comply with EPA's new regulations, Ecology may revisit its regulations, change its regulations to conform to EPA's regulations, and determine that those new state regulations are controlling for currently pending applications. In either case, because any such limitation would be inconsistent with the Ecology's authority and duty to ensure that the activity will not violate the applicable provisions of the CWA and any other appropriate requirement of state law, Ecology must expressly reserve the ability to revisit and revise the terms and conditions imposed on the Project. As it has done in past 401 Certifications, Ecology must clearly state that it may amend the Project's 401 certification in the event of changes or amendments to the state water quality, ground water quality, or sediment standards, or changes in or amendments to the state Water Pollution Control Act (RCW 90.48) or the federal Clean Water Act and implementing regulations.

Due to the 2020 401 rule's uncertain future, Commenters present arguments for denying Rye's 401 certification under both the 2020 401 rules and the pre-2020 401 rules and legal precedent.

### **III. ECOLOGY MUST CONSULT WITH AND ACCOUNT FOR INPUT FROM TRIBAL NATIONS**

Ecology must fully account for Tribal Nations' input on Rye's proposal. Rye sited the Project in an area of incalculable significance for Tribal Nations, an area that includes multiple documented Traditional Cultural Properties (TCPs) and tribal-access agreements. Moreover, Rye has, for years, failed to change the Project's location over the objections of sovereign Tribal Nations.

The Confederated Tribes and Bands of the Yakama Nation (Yakama Nation) have opposed the Project since its inception. Yakama Nation also opposed earlier iterations of a pumped-storage hydroelectric proposed at the site.

According to the Yakama Nation, Rye's development would destroy archeological, ceremonial, burial, petroglyph, monumental, and ancestral use sites—and cause significant harm to the Yakama way of life. Letter from Yakama Nation to Erik Steimle (Feb. 14, 2018), *In FERC Docket No. 14861* (Exhibit 10). A Yakama Nation representative explained the Tribe's opposition at a Washington State Senate hearing in early 2020:

As you're aware, the Columbia River was dammed over the last century. In doing so, that impacted many of our rights, interests and resources. All of these things have been impacted: our fish sites, our villages, our burial sites up and down the river. This is another example of energy development, development in the West, that comes at a cost to the Yakama Nation.

Courtney Flatt, OPB, *Northwest Clean-Energy Advocates Eye Pumped Hydro to Fill Gaps, with Tribes Noting Concerns* (July 27 2020) (Exhibit 9). The Project's destruction of TCPs and other impacts to Tribal Nations is relevant to Ecology's Tier II Antidegradation Review. See *infra* at Section V.A.

Rye has repeatedly misstated Yakama Nation's position on the Project, which has confused federal and state agencies, as well as public understanding of the Tribe's position. Yakama Nation in comment letters to FERC, has gone as far as to say that

Rye is not operating in good faith. A letter submitted by Yakama Nation in February 2019 states:

The Yakama Nation does not believe that Rye Development conducted the pre-application in a good faith effort. This is the first time that the Yakama Nation has been afforded the opportunity to read any preliminary studies conducted by Rye Development. Nor were we aware that a draft Historic Properties Management Plan was being drafted as part of this document.

Confederated Tribes and Bands of the Yakama Nation, Comment to FERC, (Feb. 21, 2019), *In* FERC Docket No. 1486.(Exhibit 2).

Yakama Nation's archaeological resource survey, completed in 2019, concluded that multiple sites of cultural and religious importance are located within the Project boundary.<sup>1</sup> According to Rye's Draft License Application, "the proposed Project area is within a NRHP-eligible [National Register Historic Properties] TCP (Traditional Cultural Property) (Push-pum) and a NRHP-eligible Multiple Property Documentation TCP (Columbia Hills) and one Archaeological District (Columbia Hills District)." FLA Exhibit E at 78. The FLA states:

The entire Columbia Hills and the archaeological sites contained within are significant to the understanding of how Yakama people lived and utilized the land. Information yielded from 'archaeological' resources is important to Yakama elders to determine what kinds of activities took place at a specific location. It also lends itself useful in identifying what kinds of resources are present.

FLA Exhibit E at 76. While Yakama Nation has filed tribal cultural resource surveys as "confidential" with FERC, available information, including FLA Appendix G, details how the Project area's importance for tribal cultural and religious resources.

The Yakama Nation is not the only affected Tribal Nation. The Confederated Tribes of the Umatilla Indian Reservation (CTUIR) has also weighed in on the development. While letters submitted by CTUIR have been filed confidentially to protect

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<sup>1</sup> The Yakama Nation is still in the process of completing their 2020 Cultural Resources Survey of the Project area.

tribal cultural resources,<sup>2</sup> the Tribe has publicly said that “the proposed undertaking is within a historic property of cultural and religious significance,” and are poised to conduct their own cultural resources survey of the area. On October 16, 2020, the Nez Perce Tribe requested that Rye conduct an ethnographic study to identify any Nez Perce-specific resources in the Project area that could be affected by construction of the project, stating that because the Tribe did not know about the development they did not have the opportunity to submit study requests to determine detrimental impacts to their Tribe. Letter from Patrick Baird to FERC (Oct. 16, 2020), *In* FERC Docket No. 14861 & Telephone Memo from Suzanne Novak to FERC (Oct. 7, 2020), *In* FERC Docket No. 14861 (Exhibit 7). On October 29, 2020, FERC directed Rye to conduct that survey.

Both CTUIR and the Nez Perce Tribe have not been afforded the opportunity to identify tribal cultural and religious resources that may be impacted by the Project.

In addition to the cultural resources impacted within the Project footprint, Project construction and operation would impact off-site, adjacent tribal and non-tribal use of an irreplaceable cultural and historic treasure: an array of over 60 bear-paw petroglyphs on the basalt walls above the Columbia River. Located in the channel of the John Day Dam Lock, the petroglyphs are open to public viewing. Rye’s application fails to mention, let alone analyze, how Project construction and operations would impact the experience of tribal and non-tribal members who view and reflect on the renowned petroglyph collection.

#### **IV. RYE’S APPLICATION IS INCOMPLETE**

Rye’s application is incomplete because it has not produced a compensatory wetland or water quality mitigation plan nor completed the required Tier II Antidegradation Review analysis. Rye’s failure to produce a compensatory mitigation proposal is grounds for Ecology to deny the 401 certification under both the 2020 401 rules and the pre-2020 401 rules. Under the 2020 401 rules, Rye’s “discharges” would violate water quality standards in federal jurisdictional waters. See *infra* Section V. Moreover, under the pre-2020 401 rules, Ecology’s scope of analysis expands to the “activities” and impacts to “waters of the state.” For the reasons explained below, under

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<sup>2</sup> See Exhibit 12 and 13, for historical context surrounding the treatment of Indian remains and cultural property in the United States resulting in the need for tribes to file cultural resource information confidentially.

either 401 legal regime, Ecology must deny the 401 application because it cannot certify that the “discharges” or Project complies with water quality standards absent a compensatory mitigation plan and Tier II Antidegradation analysis.

**A. Rye failed to submit a compensatory mitigation plan to address water quality impacts.**

According to Rye, construction of the upper reservoir will permanently destroy segments of two “likely” federal jurisdictional waterbodies: two ephemeral streams. Rye’s Final License Application (FLA) to FERC states:

Two of the six waterbodies within the study area, S7 and S8[,] are likely jurisdictional waters of the U.S. as they connect to perennial streams downstream of the project area and therefore are subject to regulation under Section 404 of the federal Clean Water Act. The remaining four waterbodies and one wetland are likely not jurisdictional waters of the U.S because they appear to be isolated and do not connect to the Columbia River.

FLA, Appendix B at 14. Rye determined that the remaining four waterbodies and one wetland are not jurisdictional under federal law. The FLA fails to analyze whether the remaining four water bodies are jurisdictional under state law. For example, Rye’s proposal will destroy a 0.3 acre ephemeral pond.

A compensatory mitigation plan is warranted because Rye’s proposal will permanently destroy waterbodies located in a semi-arid climate and result in violations of water quality standards. Rye’s FLA states:

Construction of the upper reservoir will permanently impact approximately 890 linear feet of stream S7, 75 linear feet of stream S8, and the entirety of pond P2 (0.03 acre). An additional 800 linear feet of stream S8 will be temporarily impacted through construction of the temporary construction laydown area.

FLA Exhibit E at 13. Rye deems destroying 890 linear feet of stream S7, 75 linear feet of stream S8, and the entirety of pond P2 (0.03 acre) as “relatively minor.” Rye draws this conclusion by comparing stream length destroyed to overall stream length. Rye fails to address the streams’ functionality after construction and the downstream water quality impacts of destroying and disturbing large sections of ephemeral streams.

Rye's FLA includes a "Wildlife Mitigation Plan." The Wildlife Management Plan, however, is not a wetland or water quality mitigation plan. Moreover, the Wildlife Management Plan fails to address the significant concerns raised by state and federal wildlife agencies about the Project's wildlife impacts.<sup>3</sup>

Ecology must deny the 401 certification because it cannot assure the "discharges" to WOTUS or broader Project impacts, including impacts to "waters of the state" will comply with water quality standards.

If Rye produces a compensatory mitigation proposal, Commenters request that Ecology reopen the comment period to provide for public input.

**B. Rye's application is incomplete because it fails to adequately analyze water quality impacts from destroying and disturbing federal jurisdictional ephemeral streams and other "waters of the state."**

Ecology must consider the unique water quality and habitat values of the ephemeral streams the Project will impact. "Intermittent or ephemeral streams make up a large percentage of all stream habitats and may have significant roles in spawning, foraging, refugia, and early life history habitat for many fishes." Zachary E. Hooely Underwood et al., *An Intermittent Stream Supports Extensive Spawning of Large-River Native Fishes*, Transactions of the American Fisheries Society, 426 (2018) (Exhibit 11). Rye's 401 application concludes the Project will not impact water quality or designated uses. See FLA Exhibit 13. The scientific literature does not support this cursory conclusion. See Sullivan, S. M. P., M. C. Rains, A. D. Rodewald, W. W. Buzbee, and A. D. Rosemond. 2020. *Distorting science, putting water at risk*. Science 369 (6505): 766–768 (Exhibit 17); Leslie M. Reid and Robert R. Ziemer, *Evaluating the Biological Significance of Intermittent Streams*, USDA Forest Service, Pacific Southwest Research Station" (1994) ("Intermittent channels which support distinctive riparian vegetation are most important biologically; the major biological role of smaller channels is likely to be their influence on the supply of sediment, water, and organic materials to downstream

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<sup>3</sup> The FLA describes future plans to "[m]itigate for habitat loss by conserving a compensatory mitigation parcel approved by USFWS and WDFW." FLA, Exhibit E at 48. Rye states, "The parcel will be of similar quality as the golden eagle foraging habitat impacted by the Project's permanent features. *Id.* Rye fails, however, to provide a compensatory wetland or water quality mitigation plan.

channels.”) (Exhibit 18). Ephemeral streams provide important ecosystem services, particularly in the semi-arid climate encompassed by the Project area.

Rye concludes the Project’s impacts to federal-jurisdictional ephemeral streams will not impact water quality based on a simplistic mathematical comparison. Specifically, Rye compares “stream length lost” to “total stream length,” see FLA Exhibit E at 13–18, and concludes the Project will not impact water quality. This grossly over simplistic “analysis” ignores the fundamentals of limnology, ecology, and conservation biology.

The federal jurisdictional ephemeral streams (S8 and S7) are tributaries to Swale Creek, a perennial, salmon-bearing tributary to the Klickitat River. Swale Creek is listed as a Category 5 “impaired” waterbody for temperature, pH, and dissolved oxygen. See Ecology Water Quality Assessment Listing IDs 7962 (temperature); 70966 (pH); 72907 (temperature); 72913 (temperature); 77925 (dissolved oxygen). Swale Creek is also listed as Category 4C for stream flow. See Ecology Water Quality Assessment Listing ID 6206 (Exhibit 19). Studies document the important ecology and existing water quality conditions in Swale Creek. See Aspect Consulting Inc., 2011 Swale Creek Subbasin Water Level Monitoring Summary, WRIA 30 (June 29, 2011) (Exhibit 20); Watershed Professionals Network, LLC and Aspect Consulting Inc., *Swale Creek Water Temperature Study* (Sept. 2004) (Exhibit 21); See Aspect Consulting, *Riparian Vegetation Assessment, Little Klickitat River and Swale Creek* (June 30, 2009) (Exhibit 22). Rye’s 401 application, and the FLA it incorporates, fail to analyze the downstream effects of reduced flow to Swale Creek, such as impacts to stream flow, temperature, pH, dissolved oxygen, and associated impacts on aquatic life and other designated uses. Instead, Rye summarily concludes the impact “to the watershed” from the upper reservoir will be minimal because the upper reservoir covers a relatively small area of the entire watershed. See FLA Exhibit E at 13. Notably, the 401 application and FLA ignore studies in WRIA 30, including specific studies on Swale Creek, as well as multiple 303(d) listings in Swale Creek. Commenters provide those studies as exhibits to this comment.

Ecology should deny the 401 certification based on Rye’s woefully incomplete application.

**C. Rye's application is incomplete because Rye failed to submit the analysis required under WAC 173-201A-320(4).**

Ecology must conduct a Tier II Antidegradation Review. See *infra* Section V.A. Under WAC 173-201A-320(4), “[o]nce an activity has been determined to cause a measurable lowering in water quality, then an analysis must be conducted to determine if the lowering of water quality is necessary and in the overriding public interest.” WAC 173-201A-320(4) puts the onus on the applicant to provide information to conduct the analysis. WAC 173-201A-320(4) states “information to conduct the analysis must be provided by the applicant seeking the authorization, or by the department in developing a general permit or pollution control program, and must include” the analysis set forth in WAC 173-201A-320(4)(a)–(b). Under WAC 173-201A-320(5), “[t]he department retains the discretion to require that the applicant examine specific alternatives, or that additional information be provided to conduct the analysis.” Ecology must deny the 401 certification because Rye failed to file a complete application. See *infra* at Section V.A. (explaining that Rye’s application lacks information to conduct an Antidegradation Review).

If Rye provides the required Antidegradation Review analysis, Ecology must reopen the comment period to provide for public comment on the Tier II Antidegradation Review. See *infra* Section V.A.(explaining that Ecology’s 401 certification public notice did not mention Tier II Antidegradation Review, which is inconsistent with the state’s Antidegradation program and agency guidance).

**V. ECOLOGY CANNOT CERTIFY THE PROJECT COMPLIES WITH WATER QUALITY STANDARDS**

Ecology cannot certify Rye’s proposal to build the Northwest’s largest pumped-storage hydroelectric development will comply with water quality standards. First, the Project will permanently destroy large sections of two federal-jurisdictional ephemeral streams, important habitat in the semi-arid Columbia Hills; the project will also destroy multiple “waters of the state,” including ephemeral streams and a 0.3 acre pond.<sup>4</sup> Second, the Project will create two, large reservoirs that, due to Rye’s operations, will concentrate pollutants and violate state water quality standards, and potentially impact groundwater. Third, the Project will consume large quantities of

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<sup>4</sup> Commenters request that Ecology verify Rye’s conclusions on the federal and state jurisdiction of waters impacted by the Project.

Columbia River water, exacerbating existing water quality problems in the Columbia. Rye failed to meet its burden to demonstrate Project withstands Tier II Antidegradation Policy Review, complies with numeric and narrative water quality standards, and protects designated uses. Ecology must deny Rye's 401 certification.

**A. Under both the 2020 401 rules and pre-2020 401 rules, Ecology must deny the 401 certification because it fails to meet the state's Tier II Antidegradation Policy Review.**

Ecology must deny Rye's 401 certification under the state's Tier II Antidegradation Policy Review. WAC 173-201A-300 states:

The purpose of the antidegradation policy is to:

- (a) Restore and maintain the highest possible quality of the surface waters of Washington;
- (b) Describe situations under which water quality may be lowered from its current condition;
- (c) Apply to human activities that are likely to have an impact on the water quality of a surface water;
- (d) Ensure that all human activities that are likely to contribute to a lowering of water quality, at a minimum, apply all known, available, and reasonable methods of prevention, control, and treatment (AKART); and
- (e) Apply three levels of protection for surface waters of the state, as generally described below:
  - (i) Tier I is used to ensure existing and designated uses are maintained and protected and applies to all waters and all sources of pollution.
  - (ii) Tier II is used to ensure that waters of a higher quality than the criteria assigned in this chapter are not degraded unless such lowering of water quality is necessary and in the overriding public interest. Tier II applies only to a specific list of polluting activities.
  - (iii) Tier III is used to prevent the degradation of waters formally listed in this chapter as 'outstanding resource waters,' and applies to all sources of pollution.

Ecology evaluates the applicability of Tier I and II under a pollutant-by-pollutant approach. Letter from U.S. Environmental Protection Agency to Ecology, “EPA Review of 2003 Water Quality Standards Regulations for Antidegradation” at 5 (May 2, 2007), [http://www.ecy.wa.gov/Programs/wq/swqs/epa-antideg\\_policy\\_approval.pdf](http://www.ecy.wa.gov/Programs/wq/swqs/epa-antideg_policy_approval.pdf).

Ecology must conduct a Tier II Antidegradation Policy Review for Rye’s proposal. See WAC 173-201A-320(2)(c) (stating “A Tier II will only be conducted for new or expanded actions conducted under the following authorizations[,]” which includes “Federal Clean Water Act Section 401 water quality certifications.”). Ecology’s Tier II Antidegradation guidance states: “New or expanded projects requiring a 401 certification that will potentially cause a measurable [sic] change in water quality will be required to undergo a Tier II analysis for antidegradation (for example, a new hydropower project).” *Water Quality Program Guidance Manual—Supplemental Guidance on Implementing Tier II Antidegradation*, Wash. Dept. of Ecology at 5 (Sept. 2011) (hereafter Ecology Tier II Antidegradation Guidance).

The Project will cause a measurable change in water quality, as defined in WAC 173-201A-320(3)(d), (e), and (f). Ecology, therefore, must reach a “necessary and overriding public interest determination” pursuant to WAC 173-201A-320(4) and implementing guidance. See WAC 173-201A-320(4) (“Once an activity has been determined to cause a measurable lowering in water quality, then an analysis must be conducted to determine if the lowering of water quality is necessary and in the overriding public interest.”). Specifically, Ecology must conduct a Tier II analysis on pollutants including: temperature, pH, turbidity, dissolved gas, toxic substances, and narrative criteria (WAC 173-201A-260(2)).

Under the 2020 401 rules and pre-2020 401 rules, Ecology’s review under a Tier II analysis must conclude that the lowering of water quality is not necessary and in the overriding public interest. Whether Ecology looks at the “discharges,” as required under the challenged 2020 401 rules, or the “activities” (i.e., the Project), Ecology’s Tier II analysis cannot conclude that the “lowering of water quality is necessary and in the overriding public interest.”

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- a. Once Rye files a complete application, Ecology must reopen the public comment period for the Tier II Antidegradation Review.

Commenters request that Ecology offer a public comment period on Ryes' Tier II Antidegradation Review. Ecology's 401 certification public notice is silent on Tier II Antidegradation Review. However, Ecology's Tier II Antidegradation Guidance contemplates: (1) notice of Tier II Review applicability, and (2) the opportunity for public input on the Tier II Review. Specifically, Ecology's Tier II Antidegradation Guidance states:

In accordance with section II of the rule, public involvement for the Tier II review should be included as a part of the public involvement process associated with the Ecology authorization being conducted. This means that the Tier II requirements must be adequately discussed as a part of those other public involvement mechanisms. For example, in a permit application notification, specific mention of the water body affected, the need to find that any lowering of water quality is necessary and in the public interest, and the openness to receiving public comment on these issues, would initiate the appropriate public review process for Tier II. Where an existing mechanism for public review that can be used to incorporate the Tier II review issues does not exist, Ecology will need to create one that is unique to this purpose. This can be as simple as a public notice to the local community and established interest groups.

Regardless of the mechanism or form used, the public review process should include:

- A clear statement on the need to make a Tier II antidegradation determination.
- Sufficient information to identify the water body affected, the type of action being reviewed, and the constituents of concern.
- A description of the process for reviewing and selecting the least degrading alternatives which can be feasibly implemented.
- The method by which public comments will be considered.

Ecology Tier II Antidegradation Review Guidance at 9–10. Because the 401 certification public notice did not include the requisite information, and Rye failed to produce “measurable change” analyses, Commenters request the opportunity to comment on Tier II Review in the future.

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*b. Ecology must examine measurable changes in water quality.*

Ecology must examine if Rye's "discharges" or, if applying the pre-2020 rules the "activities," would result in a measurable change in water quality using a pollutant-by-pollutant analysis. WAC 173-201A-320(3) defines "measurable change," stating:

To determine that a lowering of water quality is necessary and in the overriding public interest, an analysis must be conducted for new or expanded actions when the resulting action has the potential to cause a measurable change in the physical, chemical, or biological quality of a water body. Measurable changes will be determined based on an estimated change in water quality at a point outside the source area, after allowing for mixing consistent with WAC 173-201A-400(7). In the context of this regulation, a measurable change includes a:

- (a) Temperature increase of 0.3°C or greater;
- (b) Dissolved oxygen decrease of 0.2 mg/L or greater;
- (c) Bacteria level increase of 2 cfu/100 mL or greater;
- (d) pH change of 0.1 units or greater;
- (e) Turbidity increase of 0.5 NTU or greater; or
- (f) Any detectable increase in the concentration of a toxic or radioactive substance.

Ecology's Tier II guidances states:

There are cost and complexity issues associated with making the Tier II eligibility determination. Estimating dilution factors, collecting any necessary ambient water quality data, predicting effluent concentrations, and determining how these factors all combine to lower water quality is not a trivial undertaking. A project proponent may choose to move straight to a Tier II "necessary and overriding public interest" analysis, rather than make these eligibility determinations. This may be a cost- and time-effective strategy where there is a reasonable probability that measurable degradation will likely occur.

Ecology Tier II Antidegradation Guidance at 7. Ecology must: (1) require that Rye conduct the Tier II "measurable change" analysis, or (2) ask if Rye will choose to move straight to a Tier II "necessary and overriding public interest analysis."

For turbidity, Rye cannot evade a Tier II analysis based on the "short term exceedance" exemption. Projects that may cause short term exceedances for turbidity during inwater construction are not required to go through the Tier II Antidegradation

test if they adhere to the requirements for turbidity criteria that are described in WAC 173-201A-200(1)(e)(i) and 173-201A-210(1)(e)(i). Here, whether Ecology evaluates the Project under the 2020 or pre-2020 401 rules, the turbidity exceedances will persist beyond the “short term”: the federal-jurisdictional waterbodies, S7 and S8, are permanently altered (i.e., excavated and destroyed to make way for a reservoir). In addition, under the pre-2020 rules, Rye will destroy “waters of the state,” 0.03 acre ephemeral pond.

In sum, Ecology must complete the “measurable change” analyses or, alternatively, ask Rye’s approval to proceed to the “necessary and in the overriding public interest” analysis.

- c. *Ecology should deny the 401 certification because the lowering of water quality is not necessary and in the overriding public interest.*

Under both the 2020 and pre-2020 401 rules, Ecology cannot conclude that the lowering of water quality is “necessary and in the overriding public interest.” The Project will further scar a landscape already significantly impacted by wind and hydroelectric energy. These comments and attached exhibits detail Rye’s impacts to water quality, designated uses, and cultural resources.

As part of the “necessary and overriding public interest determination,” Ecology must consider “the benefits and costs of the social, economic, and environmental effects associated with the lowering of water quality.” WAC 173-201A-320(4)(A). In conducting the analysis, Ecology must consider costs of the social, economic, and environmental effects on:

- **Tribes and Native Americans, including the social and economic impacts to Tribes and Native Americans:** The Project would directly interfere with multiple culturally significant sites to the Yakama Nation, CTUIR, and Nez Perce Tribe. The Project would also impact tribal access. Cultural property is defined as “the tangible and intangible effects of an individual or group of people that define their existence, and place them temporally and geographically in relation to their belief systems and their familial and political groups, providing meaning to their lives.” *SHERRY HUTT ET AL., CULTURAL PROPERTY LAW, at xi* (2004). Exhibits 12 and 13 detail costs to Tribal Nations and Native Americans.

- **Water Quality:** These comments and supporting exhibits detail water quality impacts from Rye's direct "discharges" to at least two federal jurisdictional waters: S7 and S8. Those ephemeral streams are tributaries to Swale Creek, a perennial, salmon-bearing waterbody. Ecology must consider the water quality impacts of destroying large segments of ephemeral streams, particularly streams that discharge to water-quality impaired waterbodies. Under the pre-2020 401 rules, Ecology must also consider the Project's direct and indirect impacts on "waters on the state" and the Columbia River.
- **Water Quantity:** The Project requires large quantities of Columbia River water. Ecology must consider the environmental costs of increased water withdrawals under current and future climate scenarios.
- **Wildlife and Recreation:** The Project will have significant impacts on wildlife and associated recreation. On March 10, 2020, comments to FERC, the Washington Department of Fish and Wildlife (WDFW) noted: "We disagree with the applicant's opinion that the habitat near the upper reservoir is not unique or uncommon. The uniqueness of this habitat is linked to the close proximity to golden eagle and prairie falcon nesting habitat." Comments by WDFW and the U.S. Fish and Wildlife Service (USFWS) detail the Project's impacts to wildlife, including increased mortality of bats and raptors by nearby wind turbines, and wildlife habitat. WDFW Comment to FERC, (Mar. 10, 2020), *In* FERC Docket No. 1486 (Exhibit 5); USFWS Comment to FERC (Mar. 3, 2020), *In* FERC Docket No. 1486 (Exhibit 4). Recreation organizations, including Commenters, have weighed in, raising concerns about how the Project's impacts to threatened, sensitive, or candidate species, species with intrinsic value and value for nature-based recreation. Rye acknowledges the Project area is included in the regional Columbia Hills Important Bird Area designated by the National Audubon Society. See FLA Appendix D at 2.
- **Other Economic Effects:** TID's comments described the Project's economic impacts to existing energy infrastructure. Turlock Irrigation District, Comment to FERC, (Mar. 11, 2020), *In* FERC Docket No. 1486 (Exhibit 6). Ecology should also analyze the economic costs associated with degraded water quality and reduced stream flows in Swale Creek.
- **Other Social and Environmental Effects:** Beyond impacts to wildlife, the Project will destroy segments of, and permanently alter, unique ephemeral streams and destroy an ephemeral pond. This will result in aesthetic

impacts in a landscape etched by time and reminiscent of the renowned landscape art of Georgia O'Keeffe. See [Georgia O'Keeffe Museum](#) (visited Oct. 31, 2020) (landscape art from the Southwest that bears a striking resemblance to the scenic Columbia Hills). The Columbia Hills capture the imagination of artists and inspire viewers. See [Columbia Gorge Magazine](#) (Spring 2019) (cover art capturing the Columbia Hills to the west of the Project area). As the seasons change and shadows shift, the Columbia Hills and their streams remain a revered scenic vista of Washington state.

Ecology must also consider the applicant's unsubstantiated conclusions on the Project's benefits.

First, Washington's Deep Decarbonization Analysis does not call out the Project as necessary energy infrastructure to meet the state's decarbonization goals. See Evolved Energy Research, Washington State Energy Strategy Decarbonization Demand and Supply Side Results (Aug. 2020) (Exhibit 14). The state's analysis is still underway and, to date, does not demonstrate a "need" for the Project. Even if large-scale pumped-storage hydroelectric power is called out as necessary to meet the state's deep decarbonization goals, it is not clear Rye's Project is necessary to meet that demand. For example, pumped storage at a different location could meet that need. Furthermore, Governor Inslee, a national climate leader, has not taken a position in favor of the Project. Rye's FLA includes "Letters of Support"; Rye did not produce a letter of support from the Governor's Office.

Ecology must consult with the Governor's Office, the Washington Department of Commerce, Ecology staff, and other experts on the state's deep decarbonization efforts to verify if Rye's alleged "benefits" pencil out.

Even if the Project would provide climate benefits, Ecology must consider: (1) the lengthy permitting and construction timeline for pumped storage in general, (2) the added complexity for Rye's Project due to scale of tribal cultural tribal resources, and (3) the need for the Project a decade or more in the future given the rapidly-changing and dynamic nature of energy markets. For example, if Ecology finds a substantial climate benefit (*i.e.*, need) in 2020 or 2021, Ecology must evaluate if that benefit remains under future energy planning scenarios (*i.e.*, 2030 and beyond).

Second, according to a third-party economic analysis, the Project cannot provide renewable energy integration and replacement capacity to support regional

decarbonization goals affordably and reliably. Anthony Jones, Critique of the Goldendale Energy Storage Hydroelectric Project, Notification of Intent (December 3, 2019) (Exhibit 15). The Rocky Mountain Econometrics analysis concludes that a combination of rising construction costs and decreasing open-market energy prices undercut Rye's claims that the project is necessary to meet the state's decarbonization goals.

Third, Ecology should evaluate the benefit of an environmental cleanup at the former CGA smelter site by evaluating the incremental *increased* benefit Rye brings to the cleanup. Whether the Project moves forward or not, state and federal law require CGA site cleanup. In turn, Ecology must evaluate the Project's benefit by comparing the baseline cleanup requirements to the "add on" cleanup Rye promises when it builds the lower reservoir. Ecology should only include the "add on" cleanup in the proverbial benefits bucket.

Finally, Rye's jobs numbers demonstrate that, while the Project will produce construction jobs, the Project supports a relatively small number of permanent jobs (20 to 30 jobs per year post-construction in Washington). See FLA Exhibit E at 85. Ecology must consider whether the 20 to 30 permanent jobs per year outweighs sweeping and permanent cultural resource and environmental impacts.

On balance, Ecology should conclude that the Project's substantial costs far outweigh the Project's purported benefits.

## **B. Ecology cannot certify the Project complies with numeric and narrative water quality standards.**

Ecology should deny Rye's 401 certification under the 2020 401 rules and pre-2020 rules because Rye's application fails to demonstrate the "discharges" and broader "activities" will comply with numeric and narrative water quality standards. USFWS, in comments to FERC, summarizes the Project's impacts to water quality, stating:

The Service is concerned about project effects on existing populations of fish, amphibians, and other aquatic fauna and flora and the habitat that supports them . . . . We are also concerned about potential project effects on geomorphology, substrate, sediment transport, woody debris transport, streamflow regimes, flow release timing, flow fluctuation, water quality, water temperature, nutrients, and fish passage in the study area.

Letter from U.S. Fish & Wildlife to FERC, Attachment A at 4 (May 30, 2019), *In FERC Docket No. 14861* (Exhibit 16). In the following subsection, Commenters describe why Rye's application fails to demonstrate that the "discharges" and broader "activities" comply with water quality standards. Commenters divide this analysis by waterbody type: (1) ephemeral waterbodies, (2) the Columbia River, and (3) the human-created reservoirs. Ecology must deny the 401 certification under both the 2020 401 rules or, if the 2020 rules are withdrawn or vacated, the pre-2020 rules.

- a. *Under the 2020 401 rules, Ecology must deny the 401 certification because Rye fails to demonstrate the "discharges" will comply with numeric and narrative water quality standards in WOTUS streams.*

The Project requires "discharges" to two WOTUS streams (S8 and S7) by "point sources" (bulldozers or other construction equipment), which would violate numeric and narrative water quality standards. Rye fails to demonstrate that permanent destruction of unique aquatic habitats meets numeric and narrative water quality standards. Rye claims "[t]he Project is not expected to cause any impacts to water quality within or adjacent to the Project area, including to intermittent streams or the Columbia River." FLA Exhibit E at 15. This statement is factually inaccurate. Permanently destroying large segments of WOTUS waterbodies will impact water quality because: (1) the 890 linear feet and 75 linear feet stream segments will cease to exist, and (2) S7 and S8 will cease to function as connected, intact waterbodies that discharge to Swale Creek. In short, Rye ignores the upstream and downstream water quality impacts of ephemeral waterbody destruction.

As discussed above, *supra* at Section VI.A., Rye's application does not demonstrate that destroying large sections of WOTUS streams would comply with numeric and narrative water quality standards, including: temperature, turbidity, total dissolved gas, pH, deleterious materials (WAC 173-201A-200(4)(a)), aesthetic values designated uses and criteria (WAC 173-201A-200(4)(b)), and toxics and aesthetics criteria (WAC 173-201A-260(2)). The applicant bears the burden to demonstrate compliance.

Under the 2020 401 rules, Ecology has authority to deny the 401 certification based on "discharges" to federal jurisdictional waters. See 85 Fed. Reg. at 42235 (explaining "the EPA is concluding that section 401 is a regulatory provision that creates federally enforceable requirements, and for this and other reasons, its application must

be limited to point source discharges into waters of the United States.”). Here, Rye fails to demonstrate point source discharges to two WOTUS waterbodies would comply with narrative and numeric water quality standards. See *supra* at Section IV.A. In turn, Ecology must deny the 401 certification.

- b. If the 2020 401 rules are overturned or withdrawn, Ecology should deny Rye’s 401 based on violations of numeric and narrative water quality standards in ephemeral streams and a pond that qualify as “waters of the state.”*

In addition to federal jurisdictional waters, the Project would destroy “waters of the state.” Under the pre-2020 401 rules, Ecology may consider the Project’s impacts to “waters of the state.” See 2010 EPA Interim Handbook at 5 (2010) (“Note, however, that once § 401 has been triggered due to a potential discharge into a water of the U.S., additional waters may become a consideration in the certification decision if it [sic] is an aquatic resource addressed by ‘other appropriate provisions of state [or tribal] law.’”). Like the federal jurisdictional waters, Ecology should deny the 401 certification based on the discharges’ and the broader Project’s violations of numeric and narrative water quality standards in “waters of the state.”

- c. Ecology must analyze the Project’s impacts to water quality in the Columbia River.*

Ecology must verify Rye’s claim that the Project does not include “discharges” to the Columbia River. Ecology cannot complete its analysis under the 2020 401 rules absent a factual determination on the question of “discharges” to the Columbia.

Under the pre-2020 401 rules, Ecology must evaluate the Project’s impacts to water quality in the Columbia River. See *PUD No. 1*, 511 U.S. at 710-13 (“[O]nce the threshold condition, the existence of a discharge, is satisfied . . . the certifying state or tribe may consider and impose conditions on the project activity in general, and not merely on the discharge, if necessary to assure compliance with the CWA *and any other appropriate requirement of state or tribal laws*”); see also RCW 90.48.422(3) (describing Ecology authority with respect to water diversions and 401 certifications). USFWS raised concerns about the impacts to water quality in the Columbia River from diverting water, stating:

Diverted flows could affect chemical constituents such as dissolved oxygen, pH, salinity, turbidity, and others. A study should be conducted to characterize water quality at different flow levels to detect changes in water chemistry that may be

caused by project construction and operation. Altered instream water temperatures can also affect oxygen concentration and availability for fish and aquatic organisms. Any changes in water temperature should also be evaluated to determine effects on aquatic organisms.

Letter from USFWS to FERC, Attachment A at 4 (May 30, 2019) (Exhibit 16). Ecology must evaluate if Rye has developed the requested study and, if not, request that Rye complete the USFWS-requested water quality analysis.

- d. *Ecology must consider whether the Project would violate numeric and narrative water quality standards in the Columbia in the event of reservoir failure.*

Under the pre-2020 401 rules, Ecology must evaluate the Project's water quality impacts in the event of reservoir failure. The U.S. Army Corps of Engineers (Corps) raised concern about the potential for reservoir failure, stating:

[T]he Corps has concerns regarding a failure of the storage pond and if it fails will the material wash into the river. If material does wash into the river, has Rye Development evaluated the impacts of the material to impact or stop navigation or use of the John Day Lock and Dam? We would request that such failure be analyzed and addressed to ensure no impacts to either the John Day Lock and Dam or the federal navigation channel.

Letter from Corps to FERC at 1 (July 12, 2019). To date, Rye has not completed the requested analysis. Ecology must evaluate water quality impacts to the Columbia in the event of reservoir failure.

- e. *Under the pre-2020 401 rules, Ecology must evaluate whether the Project would violate narrative and numeric water quality standards in the human-created reservoirs.*

Ecology must consider water quality in the reservoirs, which would qualify as "waters of the state" once built. See WAC 173-201A-260(3)(f) ("Numeric criteria established in this chapter are not intended for application to human-created waters managed primarily for the removal or containment of pollution. This special provision also includes private farm ponds created from upland sites that did not incorporate natural water bodies."). The Project's reservoirs do not meet the "human created waters" exemption in WAC 173-201A-260(3)(f); therefore, Ecology must certify that the water quality in the reservoirs will meet state water quality standards. For the reasons

explained below, Ecology cannot develop conditions to certify compliance and, therefore, must deny 401 certification.

The human-created reservoirs would concentrate pollutants, threatening birds that USFWS and WDFW surmise would flock to the new, large waterbody. In 2020 comments on the Project, the USFWS raised concerns about water quality in the reservoirs. USFWS's comments state:

The annual loss of water from the reservoir due to evaporation is 42-acre ft. per year. Evaporation over extended periods of time may concentrate any solutes present in the water source, potentially causing the reservoir to become toxic to terrestrial and avian wildlife utilizing the Project waters. The Applicant proposes an operational adaptive water quality monitoring management program and yet there is no apparent implementing plan in the DLA containing specific, enforceable measures. We recommend the development and implementation of a reservoir water quality monitoring and management plan to ensure the water is safe for wildlife resources. This plan should include specific methods to annually monitor levels of dissolved solids, nutrients, and heavy metals in the project reservoirs and a schedule for annually reporting the monitoring results and any proposed measure addressing deteriorating water quality based on monitoring results should be developed.

U.S. Fish & Wildlife Services, Comment to FERC, (Mar. 3, 2020), *In* FERC Docket No. 1486 (Exhibit 4). For purposes of 401 certification under the pre-2020 401 rules, a monitoring plan is not sufficient for Ecology to certify that the Project would not violate water quality standards. Notably, Rye acknowledges that the reservoirs would concentrate pollutants. See FLA Exhibit E at 15 (stating “Residence in the proposed Project reservoirs for extended periods of time may concentrate any solutes present in source waters.”). However, Rye concludes that “any concentrated solutes would not impact surface waters as the Project will not discharge to any surface waters.” *Id.* Rye fails to acknowledge that human-created reservoirs are (1) “surface waters” within the meaning of “waters of the state,” and (2) 401 certification jurisdiction extends to water quality in the reservoirs under the pre-2020 401 rules.

Ecology must evaluate whether the reservoirs will meet narrative and numeric water quality standards. This includes groundwater standards. Under the pre-2020 401 rules, if Ecology concludes the reservoirs would violate narrative and numeric standards, Ecology should deny, rather than condition, the 401 certification. Rye’s operations hinge on using the reservoirs in a way that would concentrate pollutants. Therefore, Ecology cannot develop a feasible condition to mitigate violations of numeric

and narrative water quality standards. USFW and WDFW provided detailed comments to FERC detailing how the reservoirs will attract birds, including migrating waterfowl and raptors. In turn, under the pre-2020 401 rules, Ecology must deny the 401 certification based on numeric and narrative water quality standard violations in the reservoirs, as well as protection of designated uses, described in greater detail below.

### **C. The Project will harm designated uses.**

Under both the 2020 401 rules and pre-2020 401 rules, Ecology should deny Rye's 401 certification because Ecology cannot certify the "discharges" or broader Project would protect designated uses.

- a. *Under the 2020 401 rules, Ecology cannot certify Rye's discharges would protect the designated uses for federal jurisdictional ephemeral streams.*

Ecology cannot certify the "discharges" would protect the designated uses for fish, wildlife habitat, aesthetic values, and water supply. Designated uses for the segments of WOTUS-jurisdictional ephemeral streams destroyed by the Project include, but are not limited to:

- salmonid spawning, rearing, and migration;
- primary contact recreation;
- domestic, industrial, and agricultural water supply;
- stock watering;
- wildlife habitat;
- harvesting; and
- aesthetic values.

See WAC 173-201A-600(1) (stating "All surface waters of the state not named in Table 602 are to be protected for the designated uses of: Salmonid spawning, rearing, and migration; primary contact recreation; domestic, industrial, and agricultural water supply; stock watering; wildlife habitat; harvesting; commerce and navigation; boating; and aesthetic values.").

Rye's "discharges" would destroy 890 linear feet of jurisdictional stream S7 and 75 linear feet of jurisdictional stream S8. These stream segments would no longer support wildlife habitat, aesthetic values, or other designated uses. See *supra* at Section IV.A. (describing the fish and wildlife habitat and water quality benefits of

ephemeral streams). Ecology must consider impacts to designated uses in the ephemeral streams and downstream, in Swale Creek, caused by the destruction of large segments of ephemeral stream.

In addition, the Columbia Hills are renowned for their scenic beauty. Rye's discharges will destroy the aesthetic values of the ephemeral streams.

The “discharges” could also impact designated uses of domestic, industrial, and agricultural water supply in Swale Creek, which is water-quality impaired for instream flow. For example, Rye will destroy over 890 feet of ephemeral stream to build the upper reservoir. This will alter the quality and quantity of water that would otherwise flow from the Columbia Hills to Swale Creek. Rye’s 401 application and FLA summarily conclude that the Project will not impact instream flows in Swale Creek by comparing the size of the ephemeral streams to the watershed. This analysis is insufficient to certify protection of designated uses.

Overall, Ecology cannot certify the “discharges” comply with water quality standards for designated use protection.

- b. Under the pre-2020 401 rules, Ecology must deny the 401 certification based on the Project’s impacts to fish, wildlife habitat, and aesthetic values.*

Under the pre-2020 401 rules, Ecology must look more broadly at the Project’s impacts on designated uses. State and federal agencies have described in detail the Project’s impacts on fish, wildlife habitat, and wildlife. See Exhibit 5 at 2 (“The need for compensatory mitigation is supported by the evidence of a large amount of diversity of wildlife species that potentially reside in the Project.”). Rye elected to site its proposal adjacent to and, in the case of the upper reservoir, within a wind turbine complex. In multiple comments to FERC, USFWS and WDFW describe how building large reservoirs will attract birds—including threatened, sensitive, and candidate species—and, in turn, increase birds killed by the wind turbine complex. USFWS explains:

As recently as January 2020, a golden eagle wind turbine strike mortality occurred southwest of the proposed Project (Figure 1). Five additional golden eagle mortalities have been documented to the northeast of the proposed Project. Two golden eagle nests also occur within close proximity to the proposed Project. This history of mortalities shows a landscape already compromised by wind power infrastructure. Currently golden eagles appear to

have a difficult time navigating the wind currents affected by existing wind power infrastructure near the project area. The potential of the proposed Project to further the remaining laminar wind currents lends credence that resulting impacts to avian species would not be exclusive to wind power production in the area.

Exhibit 4 at 3. USFWS also notes that radio telemetry data collected in 2007 for eight months “indicates significant use of the entire project area” by golden eagles. *Id.* at 2. USFWS explains: “Since prey availability is a primary factor in governing habitat selection of golden eagles . . . the habit in the area of the proposed upper reservoir is a determining factor in golden eagle nesting preference for the area.” *Id.* at 2 - 3 (internal citations omitted). The Project also threatens bats. WDFW notes:

The construction of a new body of water at the upper reservoir, will likely provide habitat for and attract insects in close proximity to wind turbines. In turn the insect[s] will attract foraging bats to the area, putting them in close proximity to the wind turbines. Bats are also attracted to water features to drink from. Bat fatalities have been found to be caused by wind turbine blade strikes and bats flying close to the turbine blades in an effort to avoid them resulting in barotrauma. There are no available bat survey data specific to the Project upper reservoir site. Bats are known to have a long life span and slow reproductive rate. Loss of large numbers of bats may have significant impacts to local or regional populations.

WDFW, Comment to FERC, (Mar. 10, 2020), *In* FERC Docket No. 1486 (Exhibit 5). USFWS and WDFW comments detail the direct and indirect wildlife-habitat impacts from the Project’s infrastructure, and how the Project’s location, adjacent to a large wind turbine complex, will harm threatened, sensitive, or candidate species.

Both WDFW and USFWS provided detailed recommendations for the Project’s Draft License Application compensatory wildlife mitigation plan. To date, Rye has yet to produce a mitigation plan that incorporates key agency recommendations. See FLA Appendix D, *Wildlife Mitigation Plan* (June 2020). Moreover, Rye’s Wildlife Mitigation Plan details voluntary measures. *Id.* at 1 (“The purpose of this draft Wildlife Management Plan (WMP) is to develop voluntary guidelines that FFP Project 101, LLC (the Applicant and eventual Licensee) will adopt to reduce impacts to wildlife (including avian species) associated with the construction and operations of the Goldendale Energy Storage Project No. 14861 (Project).”).

The Wildlife Mitigation Plan fails to account for critical input from WDFW on the Draft License Application Wildlife Mitigation Plan. WDFW submitted detailed comments

on the inadequacy of the Draft License Application Wildlife Mitigation Plan. WDFW summarized its analysis, stating:

WDFW is concerned with the lack of compensatory mitigation for temporary and permanent impacts of the project to wildlife habitat discussed in the DLA and the Wildlife Management Plan (WMP) found in Appendix D of the DLA. Compensatory mitigation should be in the form of land acquisition and management of the land for wildlife resources. WDFW recommends no net loss of habitat function or values, consistent with our state's Growth Management Act.

WDFW, Comment to FERC, (Mar. 10, 2020), *In FERC Docket No. 1486* (Exhibit 5). To date, Rye has not identified off-site mitigation, further hindering Ecology's ability to certify the Project's protection of designated uses. See FLA Appendix D at 9–10. Rye acknowledges that the Wildlife Mitigation Plan is in the early stages, stating "This draft WMP will be updated in consultation with the United States Fish and Wildlife Service (USFWS), the Washington Department of Fish and Wildlife (WDFW), and the Oregon Department of Fish and Wildlife . . . . Consultation will be ongoing throughout the licensing and license implementation phases of the Project." Overall, the voluntary Wildlife Mitigation Plan is in its infancy, a state that prevents Ecology from certifying compliance with designated uses.

## VI. STATE ENVIRONMENTAL POLICY ACT

SEPA is Washington's core environmental policy and review statute. SEPA broadly serves two purposes: first, to ensure that government decision-makers are fully apprised of the environmental consequences of their actions and, second, to encourage public participation in the consideration of environmental impacts. *Norway Hill Preservation and Prot. Ass'n v. King Co*, 87 Wn.2d 267, 279 (1976). For decades, SEPA has served these purposes effectively, requiring full environmental reviews for projects with significant environmental impacts.

SEPA was enacted to "encourage productive and enjoyable harmony between humankind and the environment" and to "prevent or eliminate damage to the environment and biosphere." RCW 43.21C.010. Thus in adopting SEPA, the Washington legislature declared the protection of the environment to be a core state priority, "recognize[ing] that each person has a fundamental and inalienable right to a healthful environment and that each person has a responsibility to contribute to the preservation and enhancement of the environment." RCW 43.21C.020(3). This policy statement "indicates in the strongest possible terms the basic importance of

environmental concerns to the people of the state.” *Leschi v. Highway Comm’n*, 84 Wn.2d 271, 279–80 (1974).

SEPA is more than a purely “procedural” statute that encourages informed and politically accountable decision-making. SEPA requires agencies to integrate environmental concerns into their decision making processes by studying and explaining environmental consequences before decisions are made. See *Stempel v. Dep’t of Water Resources*, 82 Wn.2d 109, 117–18 (1973). In enacting SEPA, the state legislature gave decision-makers the affirmative authority to deny projects where environmental impacts are significant, cannot be mitigated, and collide with local rules or policies. SEPA provides substantive authority for government agencies to condition or even deny proposed actions—even where they meet all other requirements of the law—based on their environmental impacts. RCW 43.21C.060. As one treatise points out, when this premise was challenged by project proponents early in SEPA’s history, “the courts consistently and emphatically responded that even if the action previously had been ministerial, it became environmentally discretionary with the enactment of SEPA.”

SEPA requires an Environmental Impact Statement for “major actions having a probable significant, adverse environmental impact.” RCW 43.21C.031(1). “The primary function of an EIS is to identify adverse impacts to enable the decisionmaker to ascertain whether they require either mitigation or denial of the proposal.” *Victoria Tower P’ship v. City of Seattle*, 59 Wn. App. 592, 601(1990); WAC 197-11-400(2) (“An EIS shall provide impartial discussion of significant environmental impacts and shall inform decision makers and the public of reasonable alternatives, including mitigation, that would avoid or minimize adverse impacts or enhance environmental quality.”) The purpose of an EIS is to provide decision makers with “sufficient information to make a reasoned decision.” *Citizens Alliance To Protect Wetlands v. City of Auburn*, 126 Wn.2d 356, 362 (1995).

As noted above, the issuance of a 401 certification is exempt from SEPA. See WAC 197-11-800(9). However, if the Project includes “actions, physically or functionally related to each other, some of which are categorically exempt and some of which are not” the 401 Certification is not exempt. WAC 197-11-305(1)(b)(i); *Foster v. King County*, 83 Wn. App. 339, 348 (1996) (SEPA “categorical exemptions do not apply to actions that are a mixture of exempt and non-exempt activities”); see also *Water Quality Certifications for Existing Hydropower Dams* at 7. Therefore, Ecology must determine:

(1) if any non-SEPA exempt activities trigger SEPA, and (2) if SEPA applies, comply with SEPA before issuing the 401 certification decision.

## VII. CONCLUSION.

Commenters respectfully request that Ecology deny Rye's request for a CWA 401 certification. Rye filed a woefully incomplete application, leaving Ecology without grounds to certify the Project will comply with water quality standards. Based on available information, Ecology must deny the certification because the Project cannot pass muster under the state's Tier II Antidegradation Review, violates narrative and numeric water quality standards, and fails to protect designated uses.

Rye prematurely asks Ecology to certify an energy development that would destroy irreplaceable tribal cultural resources and have wide ranging, significant impacts on water quality, fish, and wildlife. For the reasons explained herein and supported by exhibits to this comment, Ecology must deny the Project's 401 certification. Thank you in advance for considering Columbia Riverkeeper, the Washington Chapter of Sierra Club, American Rivers, and the Washington Environmental Council's input on this controversial energy development.

Sincerely,



Lauren Goldberg  
Legal and Program Director  
Columbia Riverkeeper



Simone Anter  
Staff Attorney  
Columbia Riverkeeper



Andrew Hawley  
Staff Attorney  
Western Environmental Law Center  
*On behalf of Columbia Riverkeeper*



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Jennifer Hennessey, Governor's Office  
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Rose Longoria, Yakama Nation  
Anthony Aronica, Yakama Nation  
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Carl Merkely, CTUIR  
Nakia Williamson-Cloud, Nez Perce Tribe

## **Appendix 2**

# CIP acquires Swan Lake and Goldendale, 393 MW and 1,200 MW pumped storage hydro projects located in Oregon and Washington, USA

NOVEMBER 11, 2020

Copenhagen Infrastructure Partners (CIP), on behalf of Copenhagen Infrastructure IV K/S, has acquired ownership of the Swan Lake (Klamath County, Oregon) and Goldendale (Klickitat County, Washington) closed-loop pump storage hydro projects. The projects were previously owned and in development under a joint venture between Rye Development (Rye) and National Grid.

Swan Lake is a 400 MW project that secured its 50-year Federal Energy Regulatory Commission (FERC) license in 2019. Goldendale is a 1,200 MW project that has filed an application with FERC in June of 2020.

“At CIP, we focus on teaming with leading developers and making investments in energy infrastructure assets with a high degree of stability in cash flows,” said Christian Skakkebæk, Senior Partner at CIP. “With the long investment horizon of our funds, it enables us to participate in large projects overseeing contracting, de-risking, financing, construction and operation. Pumped storage hydro is a unique

and valuable asset class that will be a key resource as the global transition to renewable energy continues to accelerate in states such as Oregon, Washington and Montana.”

**CIP**  
Copenhagen Infrastructure Partners

Rye will continue to lead development of the two projects until start of construction. Rye is the leading developer of new hydropower at existing non-powered dams and closed loop pumped storage hydro, in North America.

“CIP acquiring Swan Lake and Goldendale is a great fit for completion of the projects,” said Erik Steimle, Vice President at Rye Development. “CIP recognizes the long term importance of new storage infrastructure projects to help harness and store wind and solar energy for meeting peak demand as both Washington and Oregon move toward a 100 percent clean electricity grid, cost-effectively and reliably.”

Several studies have concluded that the Pacific Northwest will need thousands of megawatts of new generating capacity and storage as coal is phased out of the grid and renewable energy from wind and solar replaces them. Wind and solar do not produce energy 24 hours a day. Long duration storage, particularly pumped storage hydro, will help solve this challenge by storing the energy until it is needed at peak times.

**Copenhagen Infrastructure Partners P/S** is a fund management company with seven energy infrastructure funds and more than EUR 12 billion in commitments under management. CIP is a multinational team with extensive experience and knowledge within renewable technologies. CIP has investments in utility scale renewable assets across North America, Western Europe, and Asia Pacific. The team has a broad range of competencies within corporate finance, merger & acquisitions, engineering, construction, project development and project management. CIP was established in 2012 by senior executives with a proven track record from senior positions in the energy industry. Current investments

include a wide range of energy infrastructure assets including offshore wind,  
[\(https://cipartners.dk/\)](https://cipartners.dk/)  
onshore wind, offshore power transmission, biomass and energy-from-waste, and  
solar PV investments.

**Rye Development** is a leading U.S. hydropower developer with a current pipeline of over 22 projects in 8 States. Rye's development of new hydropower on existing dams, in conjunction with financing partner, the Climate Adaptive Infrastructure Fund, and Rye's development of new closed loop pumped storage hydro, demonstrates Rye's commitment to the responsible development of untapped hydropower resources while maintaining rivers' balance of environmental and commercial requirements. Rye brings communities around the country substantial infrastructure, job creation, and a local source of renewable, non-consumptive energy.

For any further information, please contact:

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Pumped Storage ([Https://Cipartners.Dk/Tag/Pumped-Storage/](https://cipartners.dk/Tag/Pumped-Storage/))

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CIP raises capital from Vestas to further innovate and strengthen its position as a global market leader within greenfield renewable energy investments  
(<https://cipartners.dk/2020/12/18/cip-raises-capital-from-vestas-to-further-innovate-and-strengthen-its-position-as-a-global-market-leader-within->



(<https://cipartners.dk/2020/12/08/cip-and-joint-venture-partner-sse-thermal-reach-financial-close-on-49-9mw-energy-from-waste-project-slough-multifuel-located-in-the-greater-london-area/>)

2

(<https://cipartners.dk/2020/11/16/copenhagen-infrastructure-partners-partners-up-with-forestalia-for-the-investment-in-a-portfolio-of-more-than-1gw-of-onshore-wind-farms-under-development-in-aragon-spain/>)

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(<https://cipartners.dk/2020/11/16/hydrogen-renewables-australia-and-copenhagen-infrastructure-partners-announce-partnership-on-the-murchison-renewable-hydrogen-project/>)

4

(<https://cipartners.dk/2020/11/13/new-scotwind-partnership-will-provide-local-experience-and-global-expertise/>)

5

CIP and joint venture partner SSE Thermal reach financial close on 49.9MW Energy-from-Waste Project, Slough Multifuel located in the Greater London area (<https://cipartners.dk/2020/12/08/cip-and-joint-venture-partner-sse-thermal-reach-financial-close-on-49-9mw-energy-from-waste-project-slough-multifuel-located-in-the-greater-london-area/>) December 8, 2020

Copenhagen Infrastructure Partners partners up with Forestalia for the investment in a portfolio of more than 1GW of onshore wind farms under development in Aragon, Spain (<https://cipartners.dk/2020/11/16/copenhagen-infrastructure-partners-partners-up-with-forestalia-for-the-investment-in-a-portfolio-of-more-than-1gw-of-onshore-wind-farms-under-development-in-aragon-spain/>)

November 16, 2020

Hydrogen Renewables Australia and Copenhagen Infrastructure Partners announce partnership on the Murchison Renewable Hydrogen Project (<https://cipartners.dk/2020/11/16/hydrogen-renewables-australia-and-copenhagen-infrastructure-partners-announce-partnership-on-the-murchison-renewable-hydrogen-project/>)

November 16, 2020

New ScotWind partnership will provide local experience and global expertise (<https://cipartners.dk/2020/11/13/new-scotwind-partnership-will-provide-local-experience-and-global-expertise/>)

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## **Appendix 3**

# Washington State Energy Strategy Decarbonization Demand and Supply Side Results

August 25, 2020

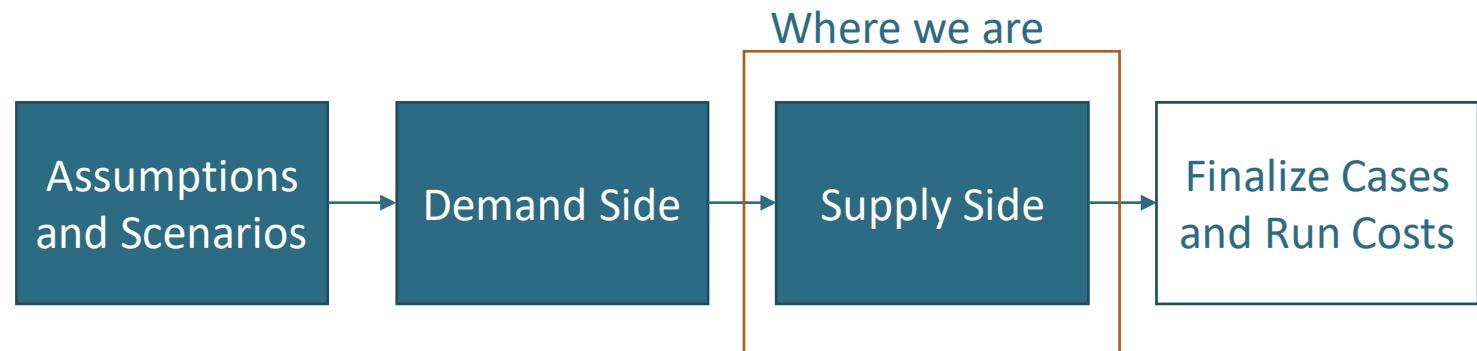


EVOLVED  
ENERGY  
RESEARCH

# Agenda

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- Review of State Targets
  - Where is Washington going and how does it compare to present day?
- Scenario Descriptions
- Demand Side Review
- Supply Side Results
  - Draft findings
- Key Findings
- Technical Appendix
  - Methodology overview
  - Key assumptions





State Targets

# Clean Energy Transformation Act (CETA)

CETA Requirements	CETA Implementation
<ul style="list-style-type: none"><li>• 2025: Eliminate coal-fired electricity from state portfolios</li><li>• 2030: Carbon neutral electricity, &gt;80% clean electricity with up to 20% of load met with alternative compliance:<ul style="list-style-type: none"><li>– Alternative compliance payment</li><li>– Unbundled renewable energy certificates, including thermal RECs</li><li>– Energy transformation projects</li><li>– Spokane municipal solid waste incinerator, if results in net GHG reduction</li></ul></li><li>• 2045: 100% renewable/non-emitting, with no provision for offsets</li></ul>	<ul style="list-style-type: none"><li>• 2025: Retire all WA coal contracts</li><li>• 2030: Constrain delivered electricity generation serving WA loads to be 80% or more from clean sources<ul style="list-style-type: none"><li>– Accounting on retail sales rather than production, i.e., losses are not included</li></ul></li><li>• 2030: Constrain the remaining 20% to come from non-delivered RECs<ul style="list-style-type: none"><li>– Linear transition to 100% delivered clean energy by 2045</li></ul></li><li>• 2045: 100% delivered clean electricity<ul style="list-style-type: none"><li>– Accounting on all electricity production for in state consumption, i.e., losses are included</li><li>– Fossil generation can supply out-of-state load</li></ul></li></ul>

# CETA Renewable Energy Credit Accounting

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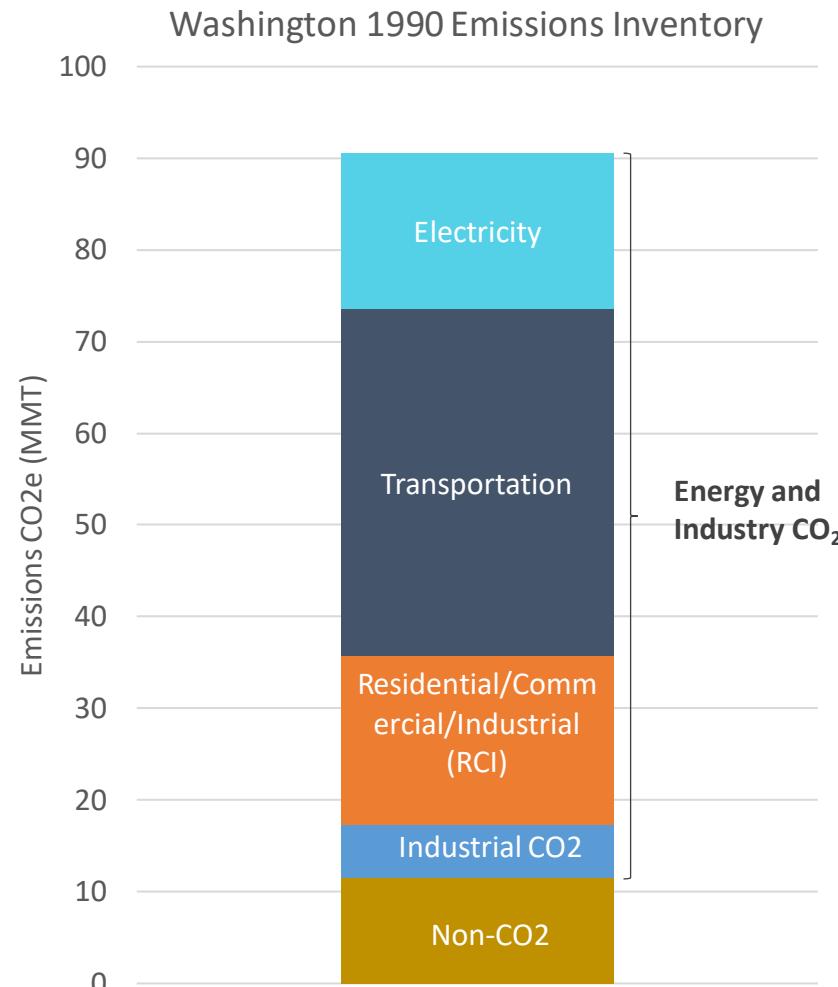
- **Implementation of delivered clean electricity (delivered RECs)**
  - Investments in new clean energy resources are specified, and only delivered MWhs to WA loads count towards CETA delivered energy compliance
  - Delivered RECs included in hourly system balancing
  - Available transmission required for delivery
- **Implementation of non-delivered RECs**
  - Accounting on an annual basis: WA requires clean energy credits equal to non-delivered portion of energy compliance each year
  - No hourly delivery or transmission required

# West Wide RPS/CES Targets



Year	Reference Case						
	2020	2025	2030	2035	2040	2045	2050
Arizona	6%	15%	15%	15%	15%	15%	15%
California	33%		60%		87%	100%	100%
Colorado	30%		30%		30%		30%
Idaho				None			
Montana	15%	15%	15%	15%	15%	15%	15%
Nevada	22%	25%	50%		75%		100%
New Mexico	20%		50%		80%	100%	100%
Oregon	20%		35%		50%	50%	50%
Utah	0%	20%	20%	20%	20%	20%	20%
Washington	12%		80%			100%	100%
Wyoming				None			

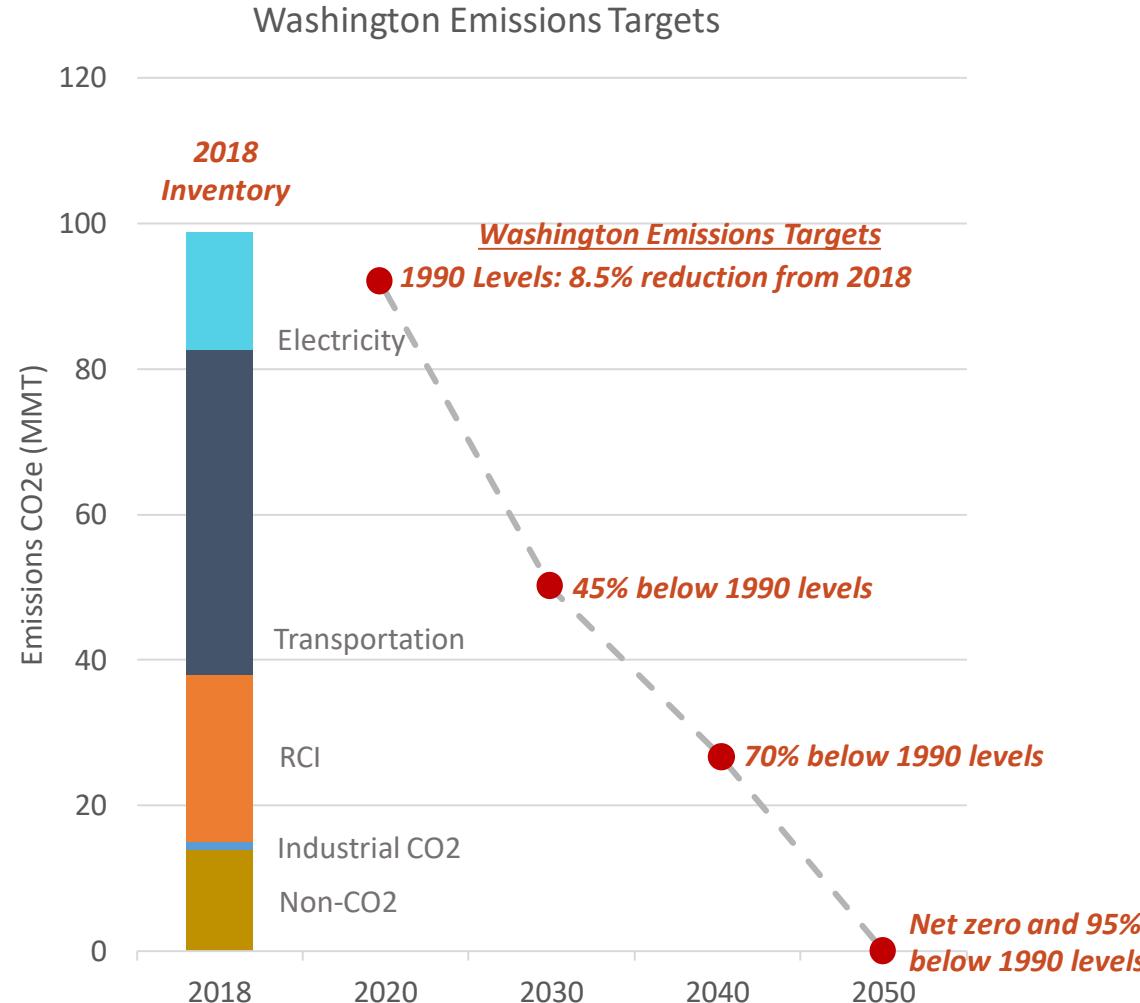
# Emissions Targets Set Based on the State's 1990 GHG Footprint



- Washington's 1990 GHG emissions footprint was **90.5 million metric tons**
- Energy and industry related CO<sub>2</sub> emissions represent ~87% of all emissions
  - CO<sub>2</sub> emissions from **electricity generation** were from coal, representing 19% of total emissions
  - Transportation (42%), RCI (20%), and Industrial CO<sub>2</sub> (6%) make up the remainder of energy and industry related CO<sub>2</sub> emissions
  - Non-CO<sub>2</sub> emissions (13%) make up the remainder
- Washington starts from a smaller share of emissions from electricity than other states because of the large hydro electric fleet producing clean energy

**Notes:** Industrial CO<sub>2</sub> includes industrial process emissions not from fuel combustion; non-CO<sub>2</sub> emissions includes agriculture, waste management, and industrial non-CO<sub>2</sub> emissions

# Washington Emissions Targets



- Washington established economy-wide emissions goals of net zero and 95% reduction in gross emissions by 2050
  - In line with IPCC targets
- Implementation of emissions goals:
  - 95% gross emissions reductions target is independent of land-based emissions reductions
  - Emissions reductions possible in non-energy and non-CO<sub>2</sub> sources are uncertain and need more research to develop reduction measures
    - We assume that the limited land use mitigation potential will offset the emissions from this category
- **Target for the energy sector: Net zero by 2050**

# Emissions Targets by Year

Million Metric Tons

Year	Non-CO <sub>2</sub> /Non-Energy Emissions	Incremental Land Sink	CO <sub>2</sub> Energy and industry	Economy wide CO <sub>2</sub> Target to reach statewide GHG limits
1990	11.4	0.00	79.2	90.5
2020	14.5	0.00	76.0	90.5
2025	12.8	-0.75	58.1	70.1
2030	11.1	-1.50	40.1	49.8
2035	9.5	-2.25	31.2	38.5
2040	7.8	-3.00	22.3	27.2
2045	6.2	-3.75	11.2	13.6
2050	4.5	-4.5	0.0	0.0

Forecasted from latest WA non-CO<sub>2</sub> inventory using EPA growth rates

Starting target of 76 MMT:  
COVID-19 drops emissions below this target

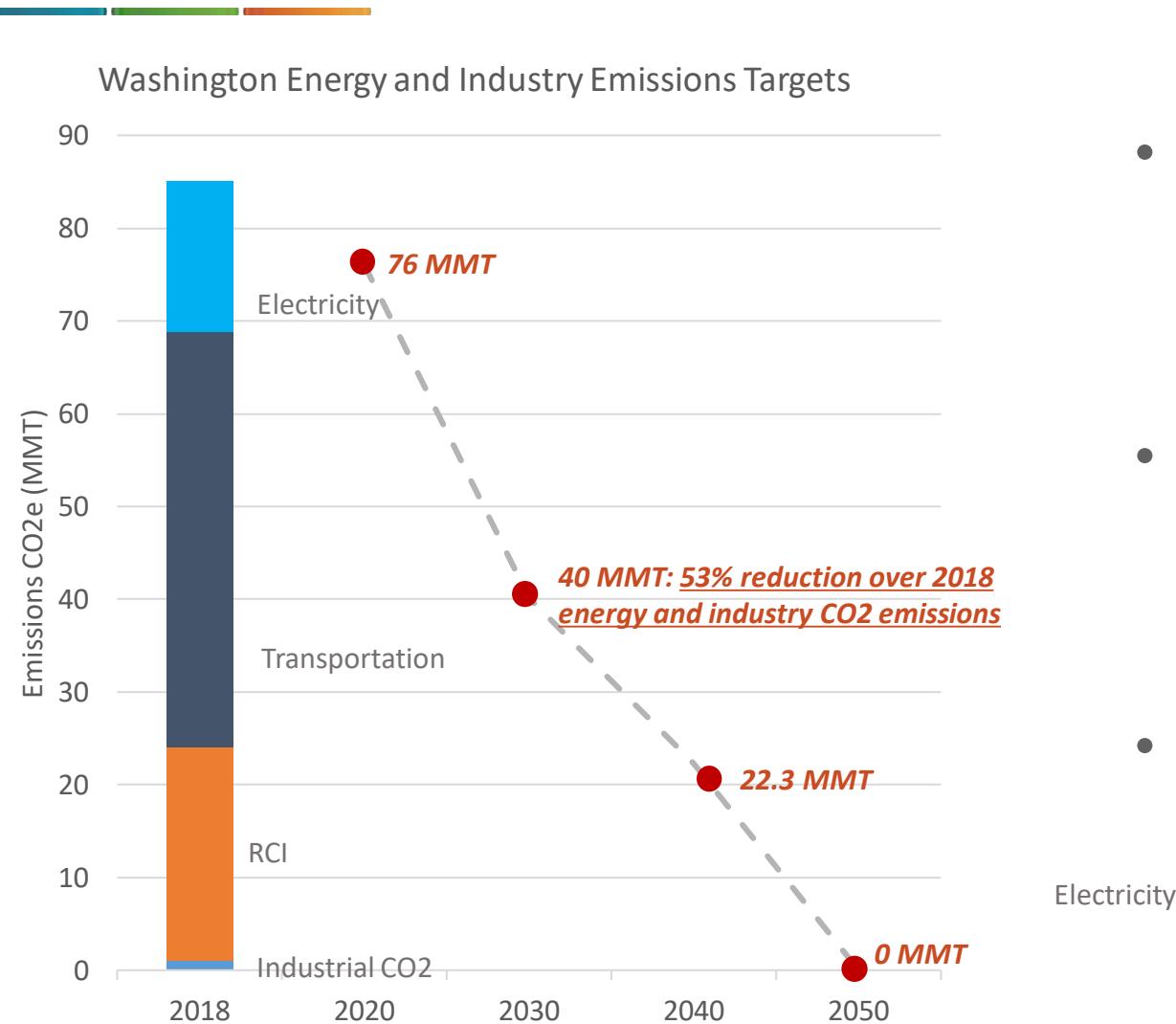
~50% reduction in energy emissions over 10 years

5% gross emissions from non-CO<sub>2</sub>, 100% offset by incremental land sink

Non-CO<sub>2</sub> emissions reductions significant but uncertain and requires future research

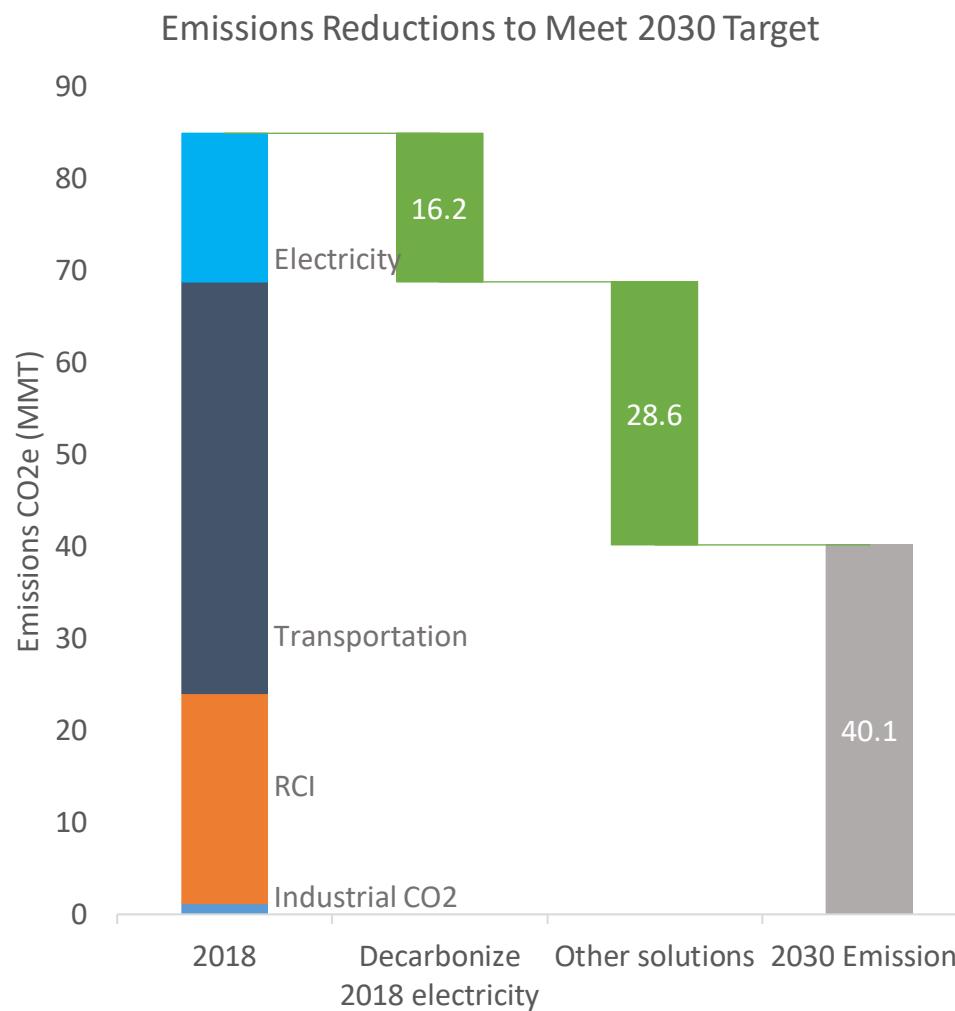
Net zero target in energy and industry

# 2030: The Energy Emissions Challenge



- 2030 emissions target for energy and industry less than half of 2018 emissions
  - 40 MMT assumes linear decreases in non-CO<sub>2</sub> emissions and linear increases in incremental land sink through to 2050
- Washington's electricity sector is already very clean: Early emissions reductions are required from actions in other sectors to meet the 2030 target
- **The 2030 challenge: How to cut emissions in half in 10 years?**

# Options and Obstacles to Reaching 2030 Targets



- Decarbonizing all electricity generation from 2018 leaves 28.6 MMT to decarbonize (40% of remaining emissions)
- What are the options?
  - **Energy Efficiency:** Reduce energy use through more efficient appliances, processes, and vehicles
  - **Electrification:** Electrify end uses and supply with clean electricity
  - **Decarbonize fuels:** Displace primary fossil fuel use with clean fuel
- What are the obstacles?
  - Efficiency and electrification require new demand-side technology investments
    - Dependent on customers replacing inefficient technologies with efficient and/or electrified options
    - Dependent on stock rollover: A customer with a new ICE vehicle won't replace it the next year with an electric one
  - Decarbonized fuels require bio or synthetic fuels technologies that have yet to be deployed at scale
  - **Limits to what can be achieved in 10 years**

# West-Wide Emissions Targets

States without targets follow trajectory for 80% economy wide emissions reductions in decarb cases



Year	Reference Case							Decarbonization Cases						
	2020	2025	2030	2035	2040	2045	2050	2020	2025	2030	2035	2040	2045	2050
Arizona				None						60		34.4		8.8
California	340		211		70.3	0	0	340		211		70.3	0	0
Colorado	95		47		23.2		-0.6	95		47		23.2		-0.6
Idaho			None					8.7		14.1		4.3		2.1
Montana			None					25		15.6		5.4		2.6
Nevada	45		26.7		9.1		0.3	45		26.7		9.1		0.3
New Mexico	60		30.5		10.2		0	60		30.5		10.2		0
Oregon	55		35.7		12.8		6.2	55		35.7		12.8		6.2
			None							41.3		24.4		7.6
Washington			None					75.3		39.6		27.2		0
Wyoming			None							43		25.5		7.9



## Scenario Descriptions

# Scenario Descriptions and Implications

Scenario	Description
Reference	<b>Business as usual energy system through 2050</b> Assumes current policy is implemented
Electrification	<b>Investigates economics of a rapid shift to electrified end uses</b> Aggressive electrification, aggressive efficiency, relatively unconstrained technology availability in state and out of state
Transport Fuels	<b>Investigates reaching decarbonization targets with reduced transportation electrification</b> What alternative investments are needed when larger quantities of primary fuels remain in the economy?
Gas in Buildings	<b>Investigates reaching decarbonization targets with lower building and industry efficiency and electrification</b> What is the impact of not achieving a transition from gas to electricity in the Electrification Scenario?
Constrained Resources	<b>Investigates a future that limits potential for transmission expansion into Washington</b> What alternative investments in in-state resources would Washington make if transmission expansion is limited due to siting/permitting challenges?
Behavior Changes	<b>Investigates how lower service demands could impact decarbonization</b> Shows the economic benefits in terms of reduced energy infrastructure and fuel burn of behavior change policy if social structure or economic changes naturally drive lower service demands (i.e., more telecommuting post COVID-19)

# Scenario Summary

Scenario Assumptions	Reference (R)	Electrification (E)	Transport Fuels (TF)	Gas in Buildings (GB)	Constrained Resources (CR)	Behavior Change (BC)	
Clean Electricity Policy	CETA: Coal retirements 2025; 100% carbon neutral 2030 (with alternative compliance); 100% RE 2045						
Economy-Wide GHG Policy	None	Reduction below 1990: 45% by 2030; 70% by 2040; 95% and net zero by 2050					
Buildings: Electrification	AEO	Fully electrified appliance sales in most sub-sectors by 2050	<b>Half electrification of other four cases</b>	Fully electrified appliance sales in most sub-sectors by 2050			
Buildings: Energy Efficiency	AEO	Sales of high efficiency tech: 50% in 2025, 100% in 2030	<b>25% in 2025, 50% in 2030</b>	Sales of high efficiency tech: 50% in 2025, 100% in 2030			
Transportation: Light-Duty Vehicles	AEO	100% electric sales by 2035	<b>50% electric sales by 2035</b>	100% electric sales by 2035			
Transportation: Freight Trucks	AEO	Same as GB, CR, and BC Cases	<b>Half the electric sales/no hydrogen adoption</b>	HDV long-haul: 25% electric, 75% hydrogen sales by 2045 HDV short-haul: 100% electric sales by 2045 MDV: 70% electric sales by 2045			
Industry	AEO	Generic efficiency improvements over Reference of 1% a year; fuel switching measures; 75% decrease in refining and mining to reflect reduced demand					
Service Demand Reductions	Baseline service demand informed by AEO					<b>VMT by 2050: 29% LDV, 15% MDV/HDV 15% Com, 10% Res</b>	
Resource Availability	NREL resource potential; 6 GW of additional transmission potential per path; SMRs permitted				<b>Washington: No new TX, 50% of RE potential, no SMRs</b>	Same as R, E, TF, and GB Cases	



## Results

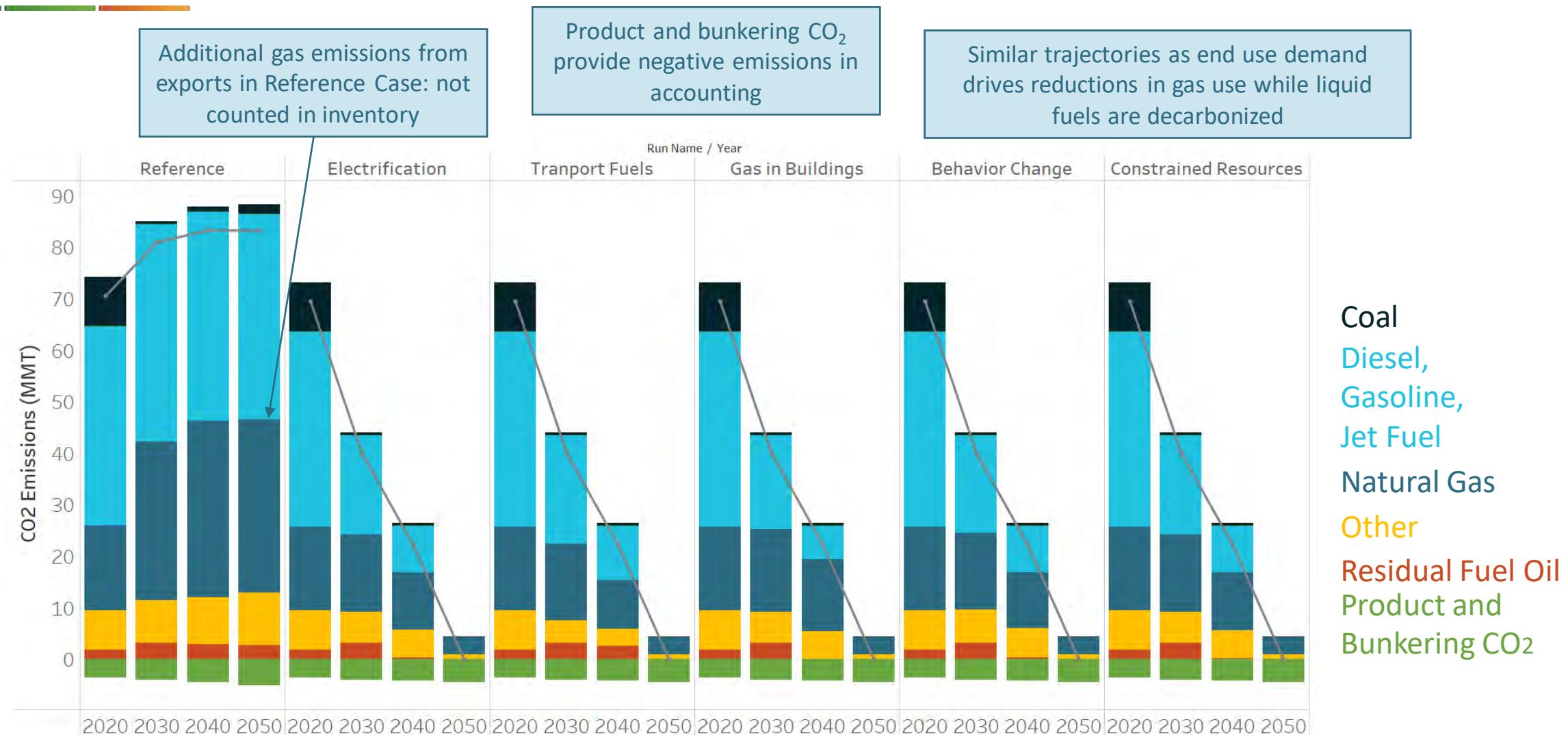
# Structure of results

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- The results in this section are structured as follows:
  - **Economy-wide GHG emissions** – Emissions reductions by fuel to reach net zero
  - Changes to **energy demand**
  - **Electric sector investments and operations** metrics are shown to better understand the scale and rate of change required
  - Transformation to **fuel demand and supply**, including gas, hydrogen and liquid fuels

# Emissions by Scenario

Similar emissions profile to achieving net zero in energy by 2050 across scenarios

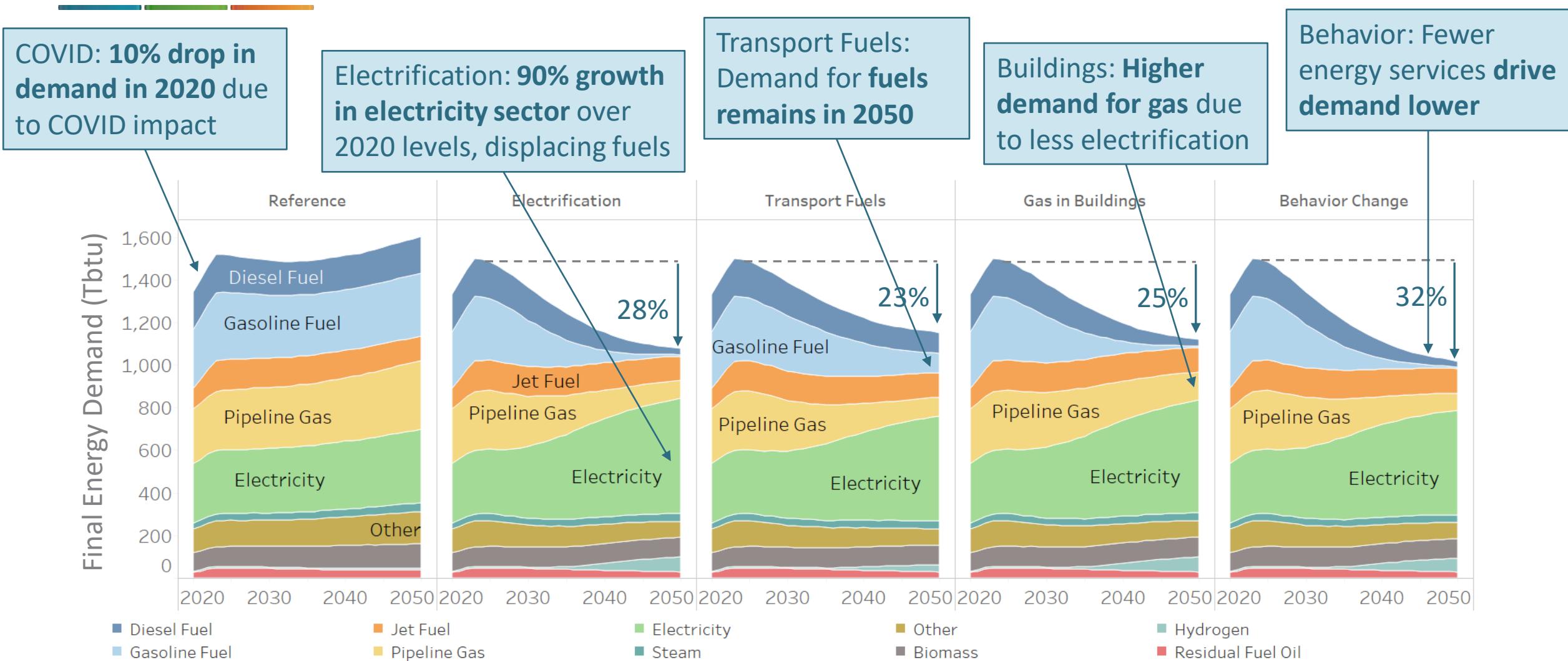




Demand Side

# Final Energy Demand

Electrification and efficiency drive lower total energy demand



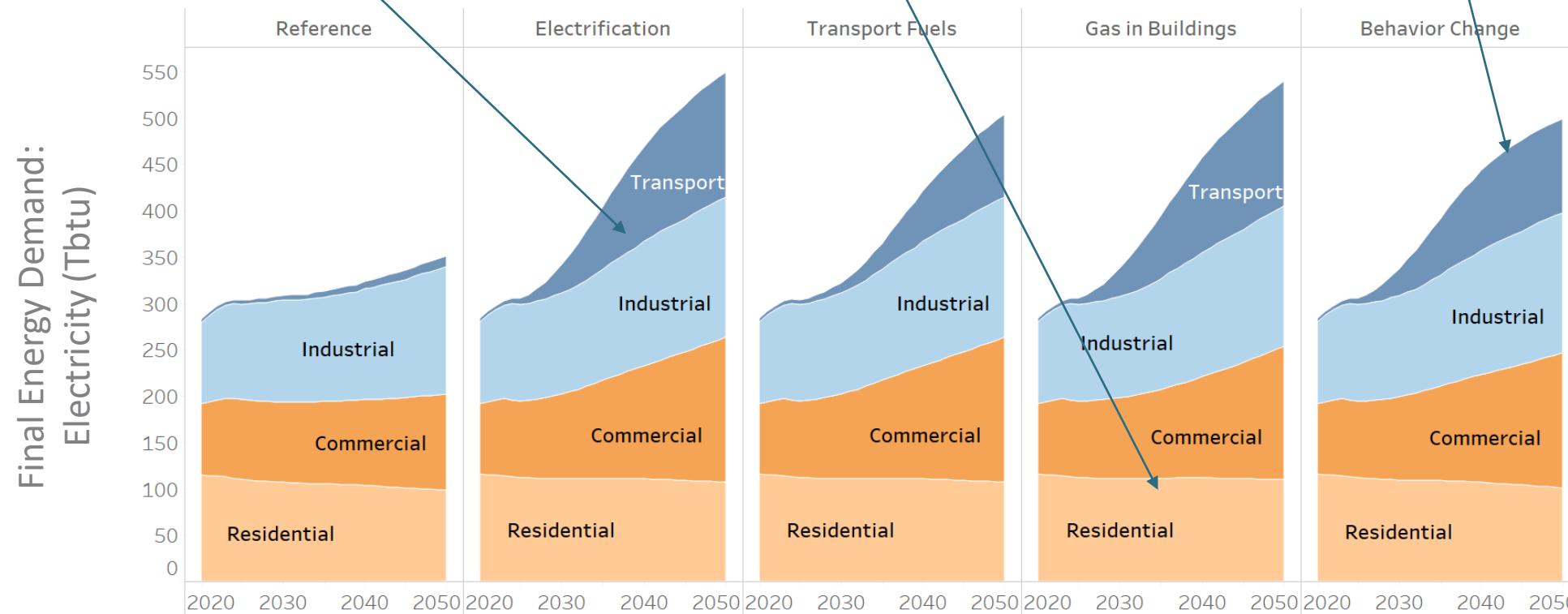
# Final Energy Demand: Electricity

Electricity use in all decarbonization scenarios grows significantly

Transport electrification largest differentiator between cases

Lower electrification in buildings offset by lower levels of efficiency

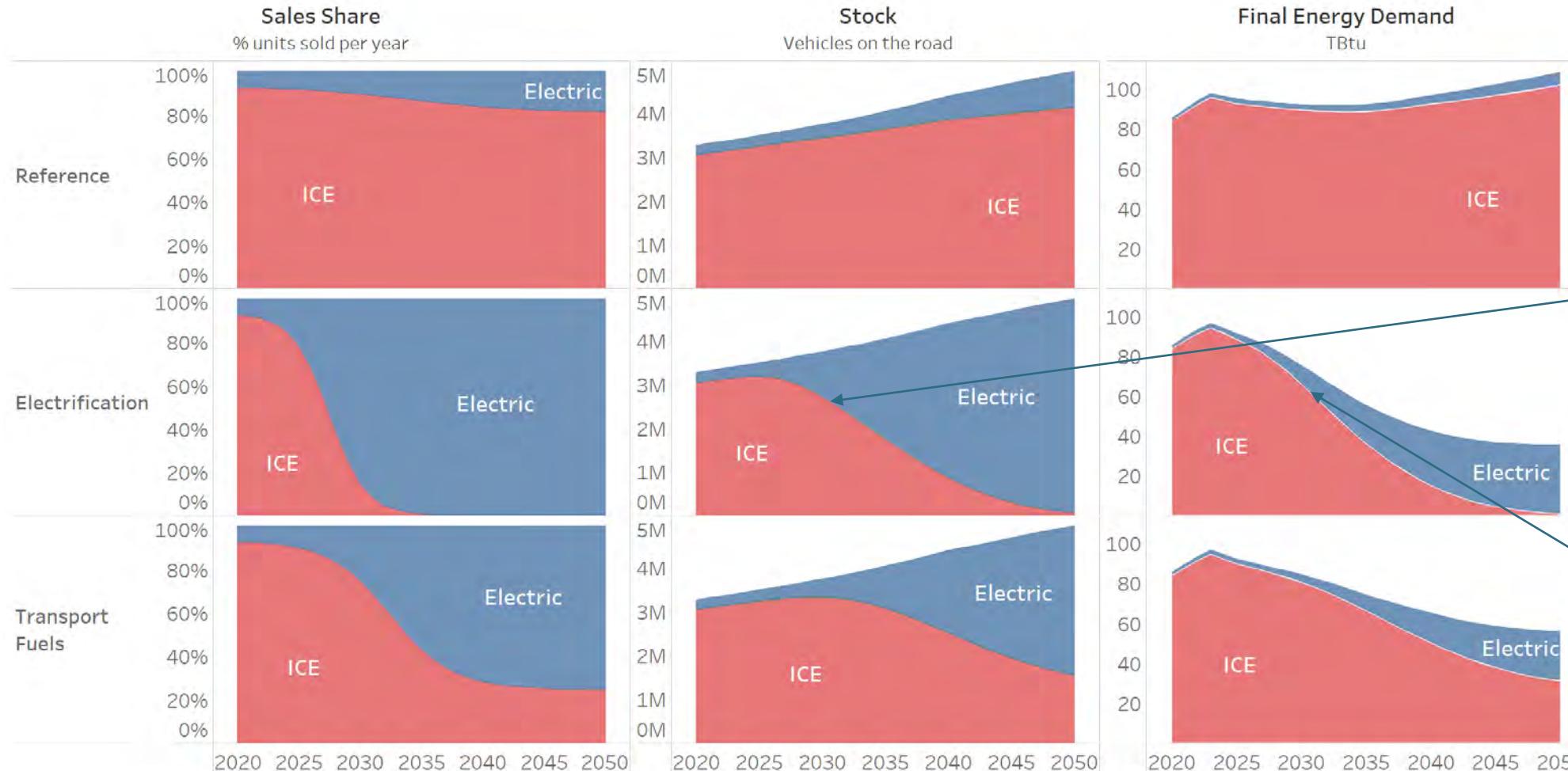
Behavior Change drives lower demand in transport and buildings



# Light-Duty Vehicles: BEVs are Key to Lower Energy Demands

Lower energy demands reduce the need for investment in clean energy technologies to meet net zero

Projected Sales, Stock, and Final Energy Demand

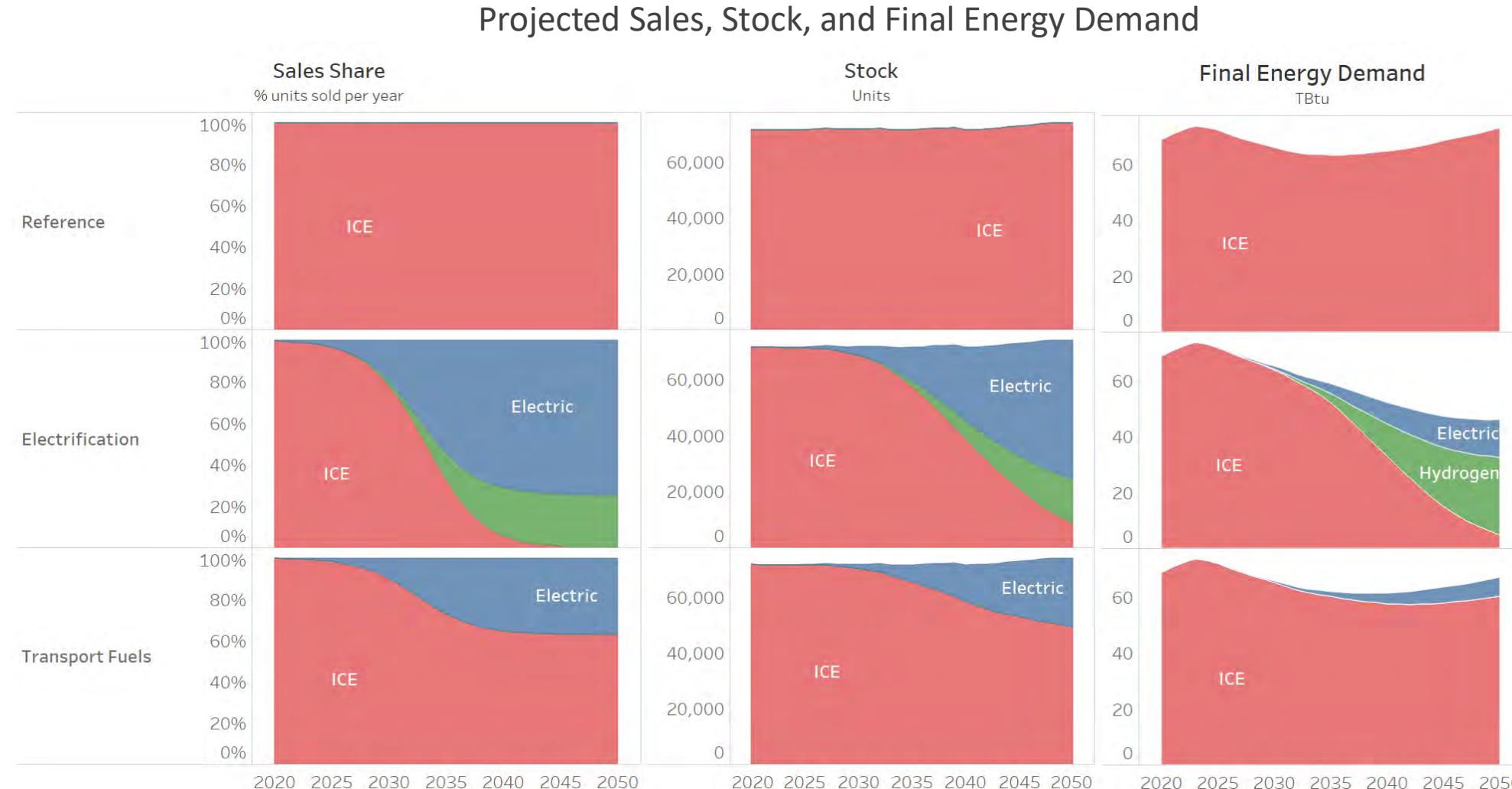


73% of vehicles are ICE in 2030 in the Electrification Case

Electrification Case final energy demand for fuels remains high in 2030: 74% of Reference in 2030

# Heavy-Duty Vehicles: Hydrogen Demand in Long Distance by 2050

Adoption of hydrogen in long-haul and electric in long and short-haul drives changes in demand



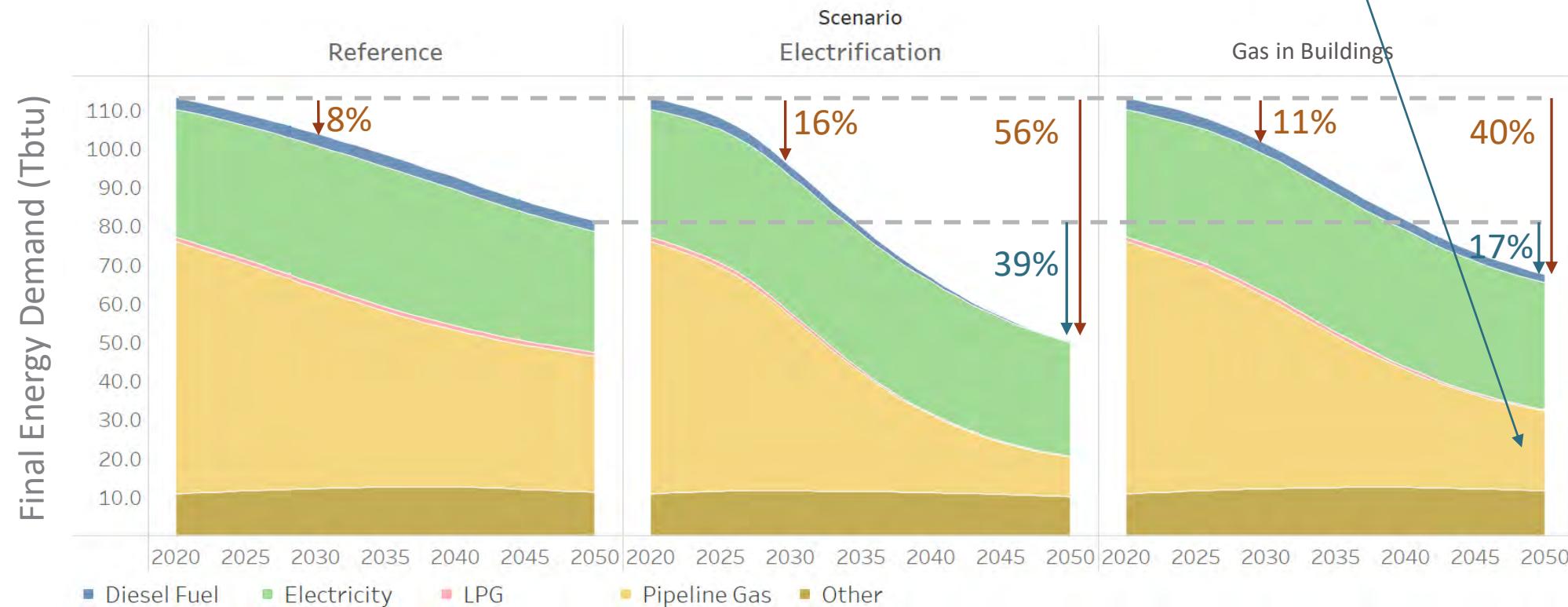
# Residential Space Heating

More efficient home heating is driven by adoption of more efficient and/or electrified technologies

2030 Challenge: Delay in stock rollover turning sales into stock and energy changes

Significant reductions in energy demand by 2050 due to efficiency and electrification

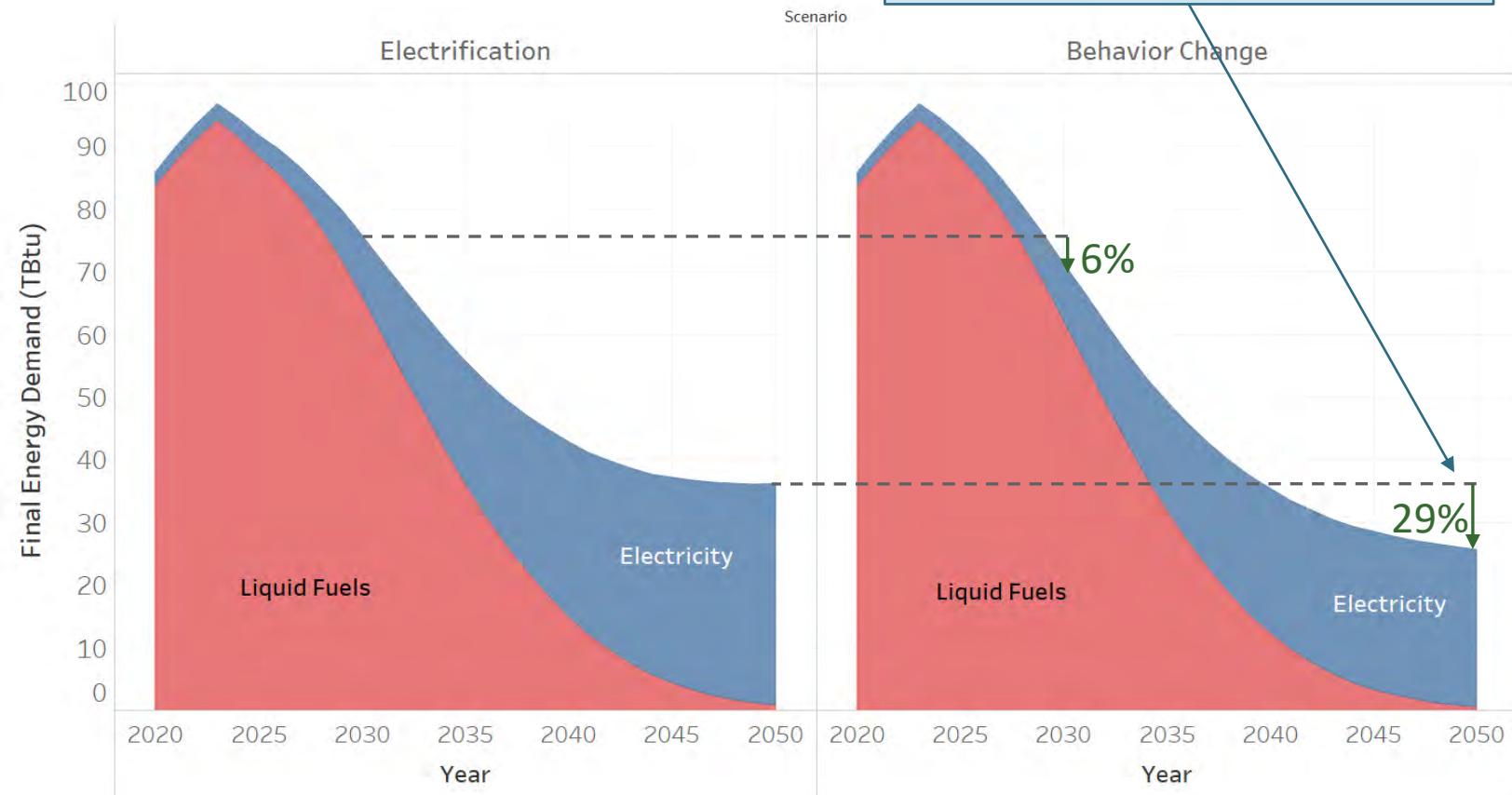
Fuel use for heating can be served by fossil or clean fuel alternatives



# Behavior Change: Transportation

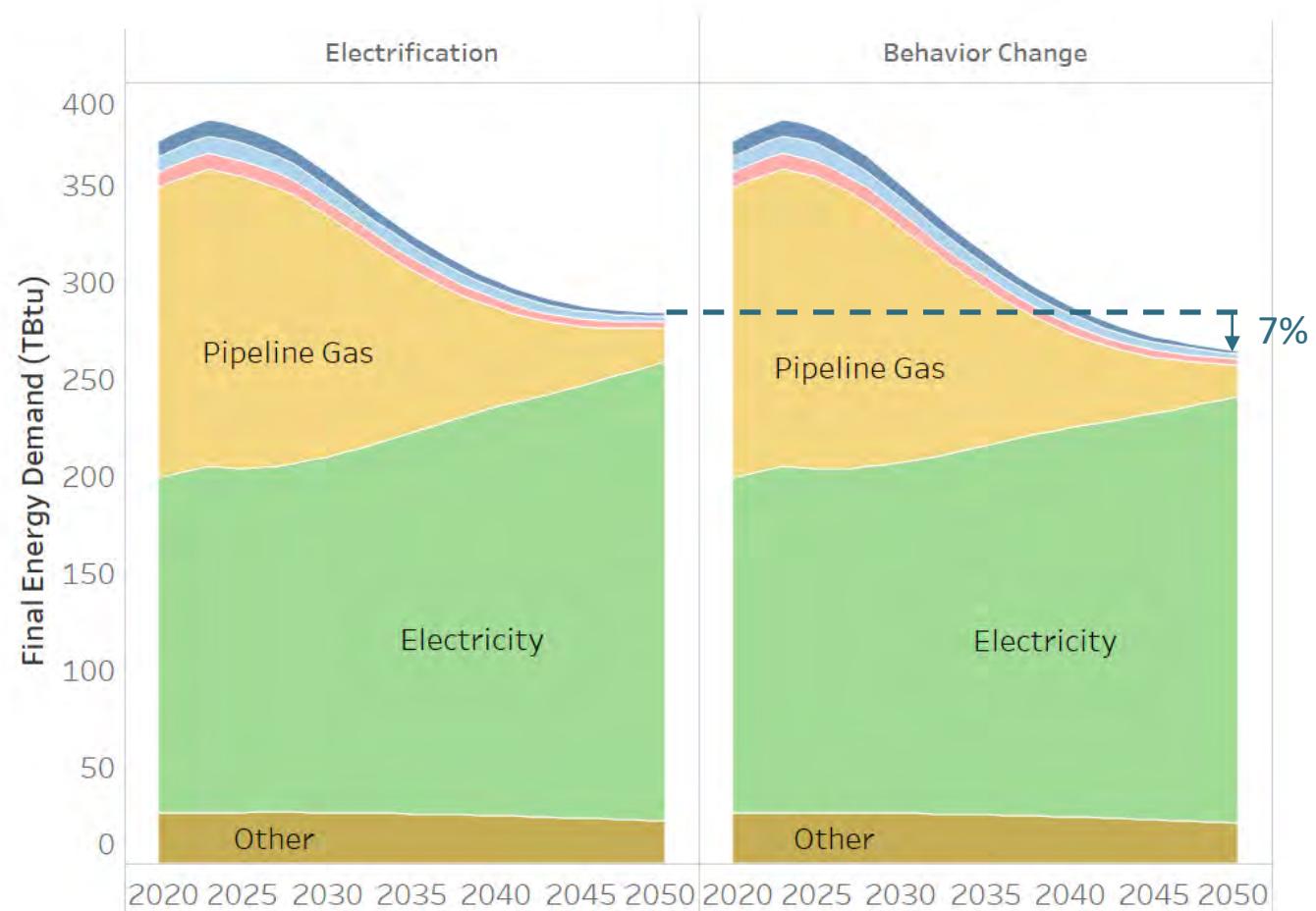
- VMT reductions increasing over time
  - 29% in light-duty vehicles by 2050
  - 15% in medium- and heavy-duty vehicles by 2050
- 2030 reductions are modest and provide little help to solving the 2030 Challenge
  - Are there more aggressive behavior change measures that can happen faster?

Example: Final Energy Demand from Light-Duty Autos



# Behavior Change: Residential and Commercial

- Package of service demand measures for residential and commercial sectors
  - Reductions for several subsectors, including air conditioning, heating, lighting, and water heating
- Service demand measures achieve 7% overall reduction by 2050 in the residential and commercial sectors
  - 2% reduction in 2030





Supply Side

# Electricity Capacity in Washington

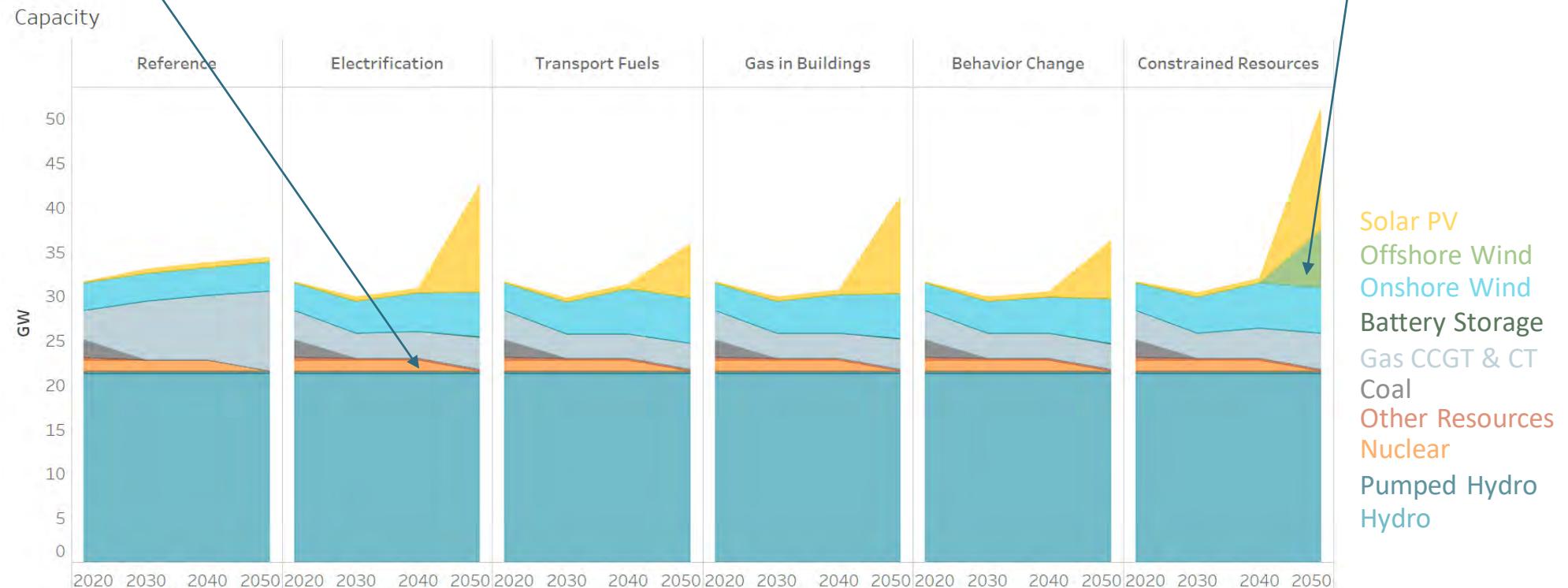
Washington relies heavily on imports of clean energy so capacity builds stay relatively flat

CGS not extended. O&M costs too high compared to alternatives

Similar builds across decarbonization cases other than Limited Resource Case

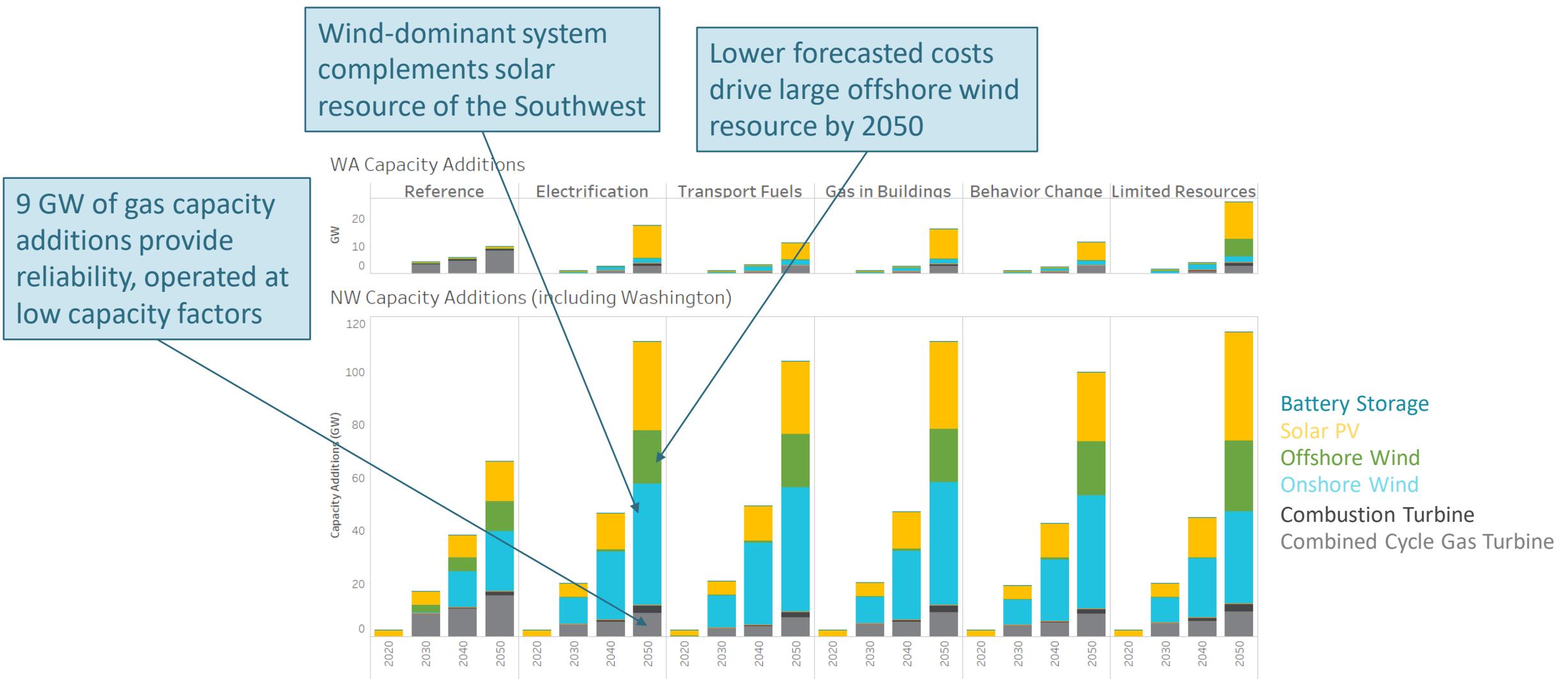
Limited Resource Case builds offshore wind and more solar to compensate for lost TX

Relatively little growth in capacity due to significantly increased imports



# Capacity Additions in Washington and the Northwest

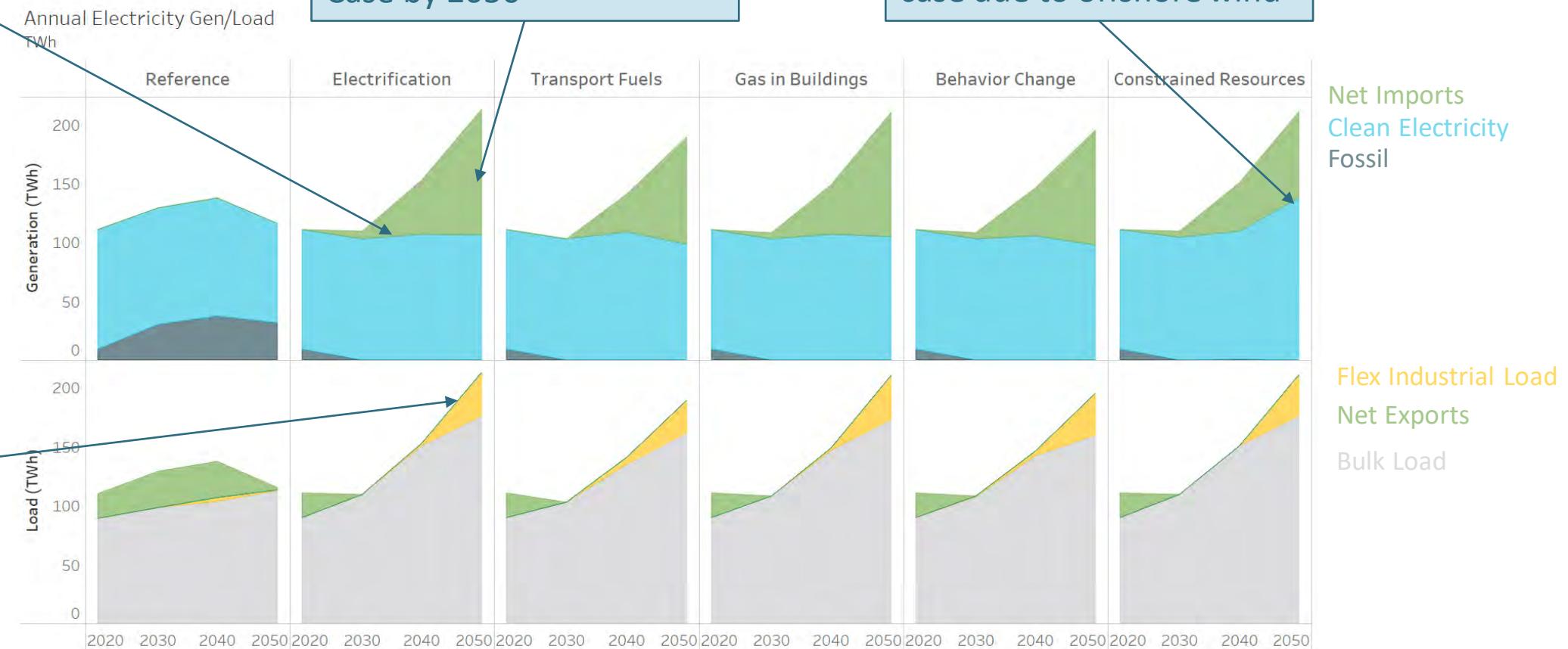
Washington part of a larger integrated electricity system



# Generation and Load in Washington

Rapid increases in imports provide clean energy for expanding electricity sector

Growing reliance on clean imports to meet load growth, CETA and emissions goals

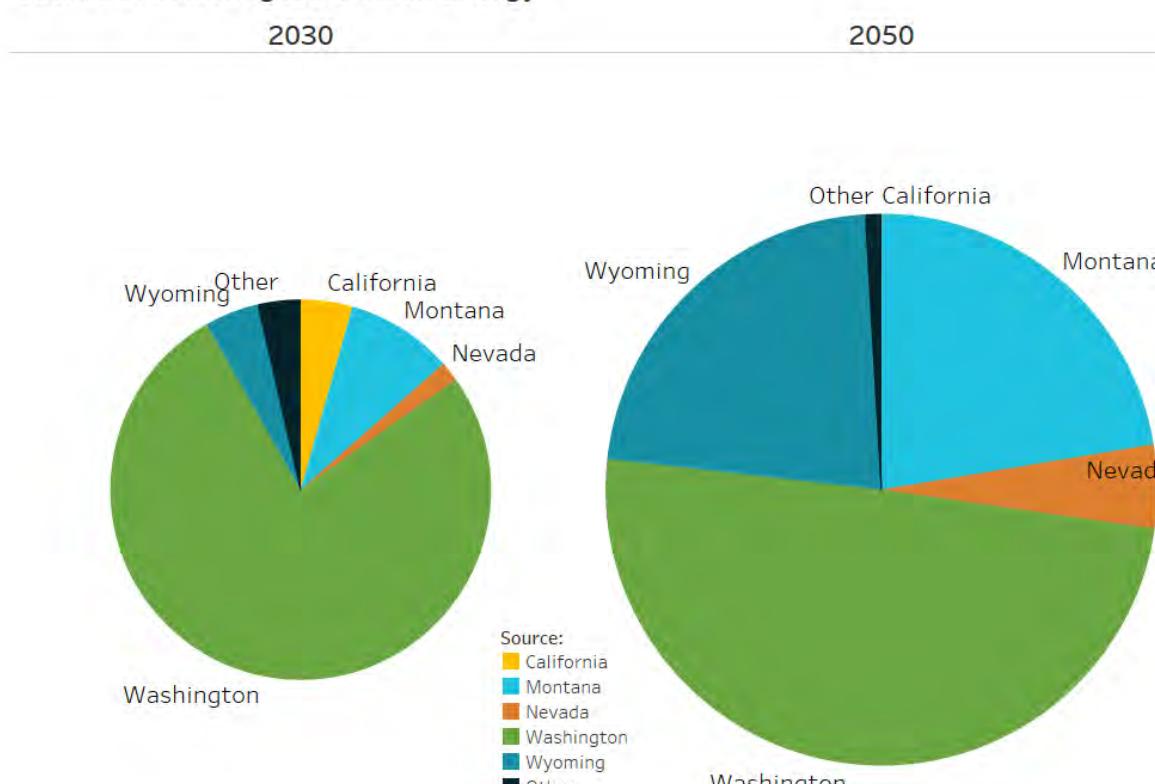


Added flexible loads by 2050 (electrolysis, boilers) more than double 2020 load

# Where do Imports Come from?

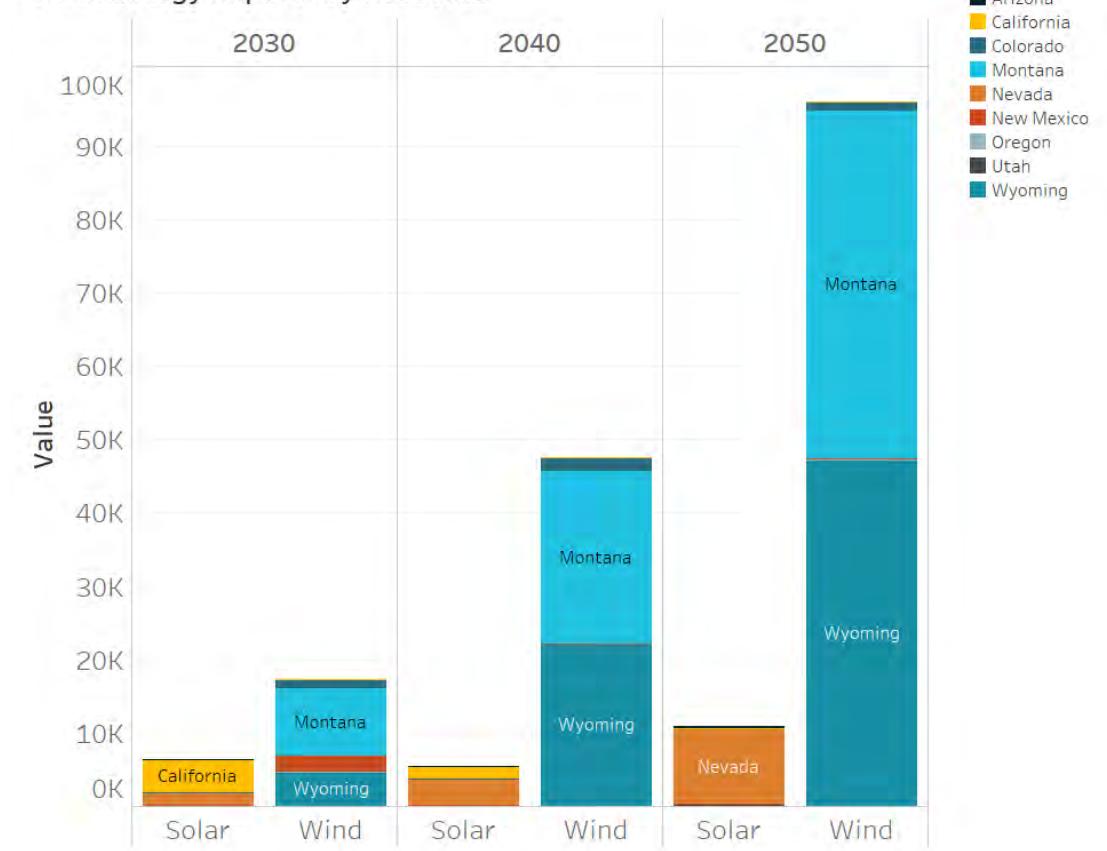
Clean electricity imports from Electrification Case

Source of Washington's Clean Energy



High quality wind resources from Wyoming and Montana account for 45% of WA clean electricity in 2050

Clean Energy Imports by Resource



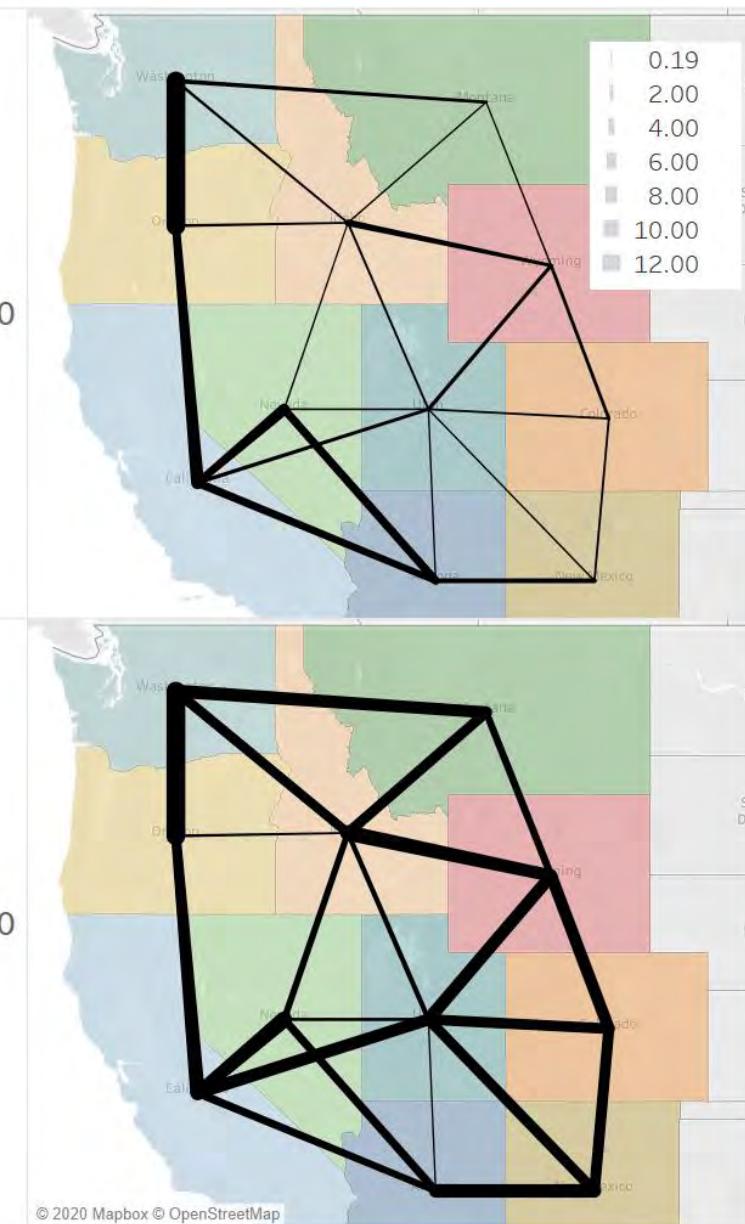
# Expanding Transmission Facilitates Imports

Increased TX capacity required to import so much energy

- Expansion of up to 6 additional GWs of TX between states permitted in the model
  - MT->WA: Maximum 6 GW added
  - ID->WA: 5 GW added
- Western states become far more interconnected, taking advantage of least cost clean energy resources
- Additional solar and offshore wind build in Constrained Resources Case from inability to expand interties

Transmission Expansion by 2050: Electrification

Year



# Regional Capacity in 2050

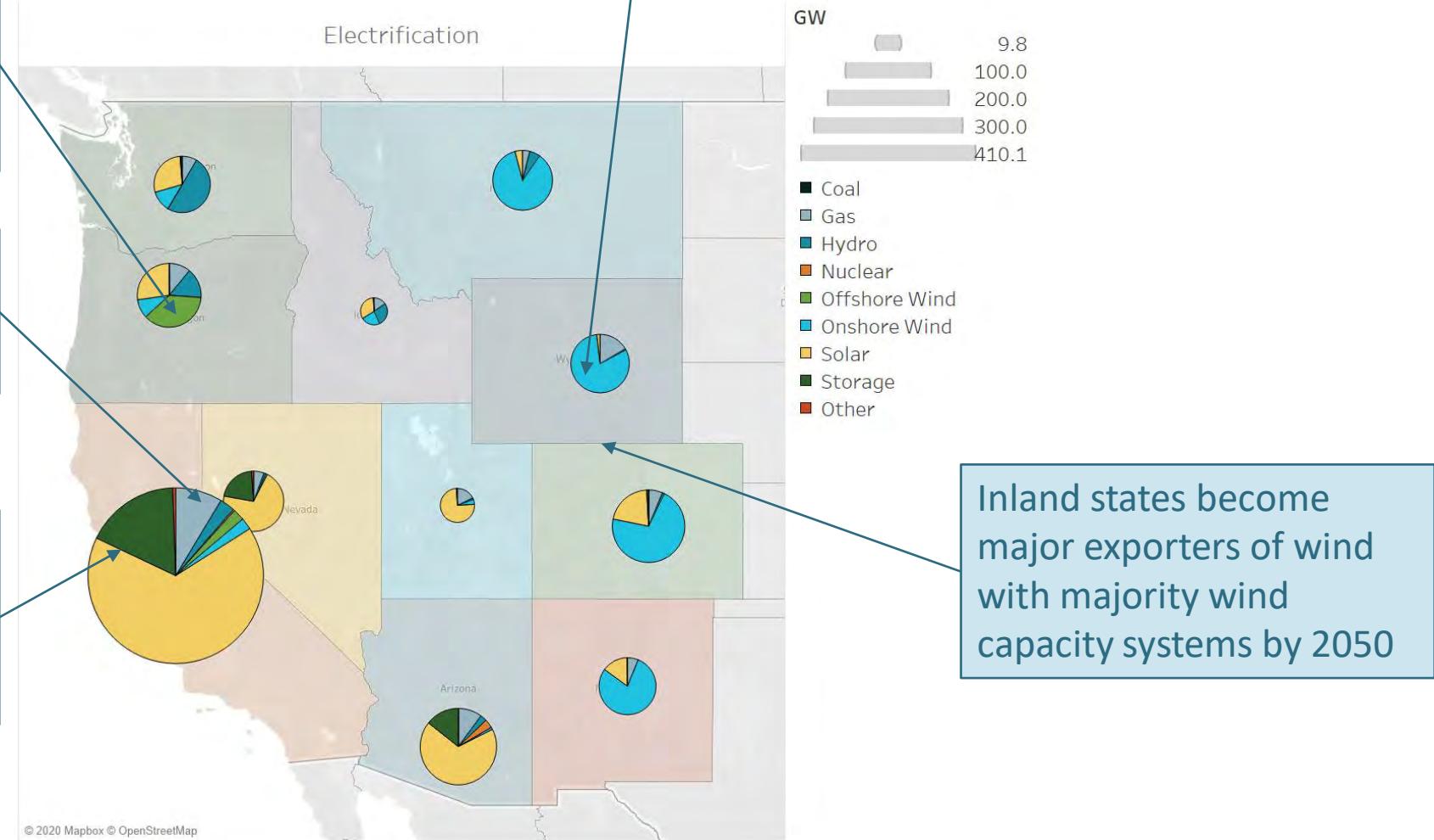
## Electrification Case

Offshore wind built in Northwest and California to meet 2050 clean energy needs

Gas capacity provides reliability but very little energy in 2050

Large quantity of storage built in solar states for diurnal balancing

Large wind resource complements Southwestern solar resource

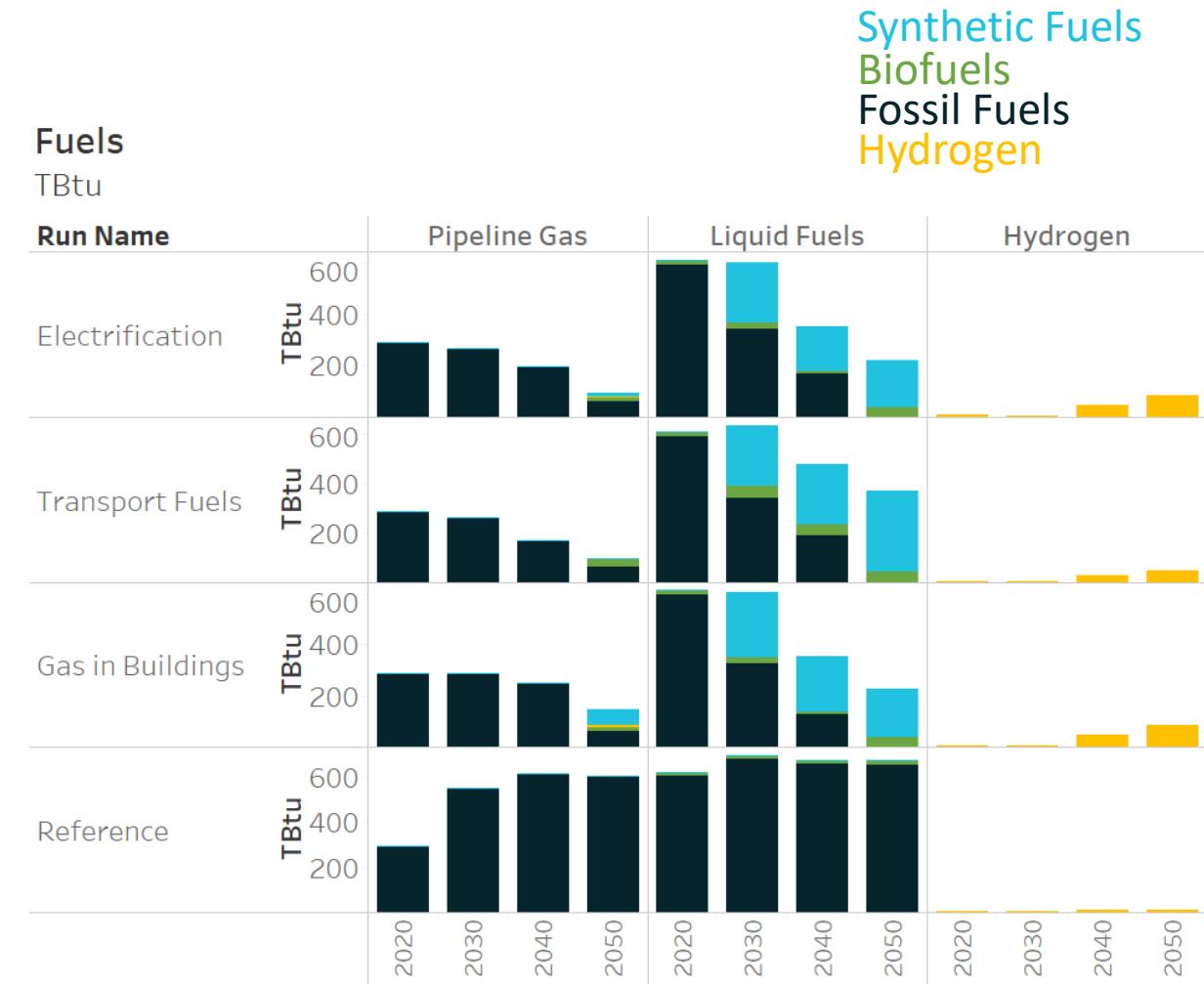


Inland states become major exporters of wind with majority wind capacity systems by 2050

# Clean Fuels are Important to Reach Decarbonization Targets

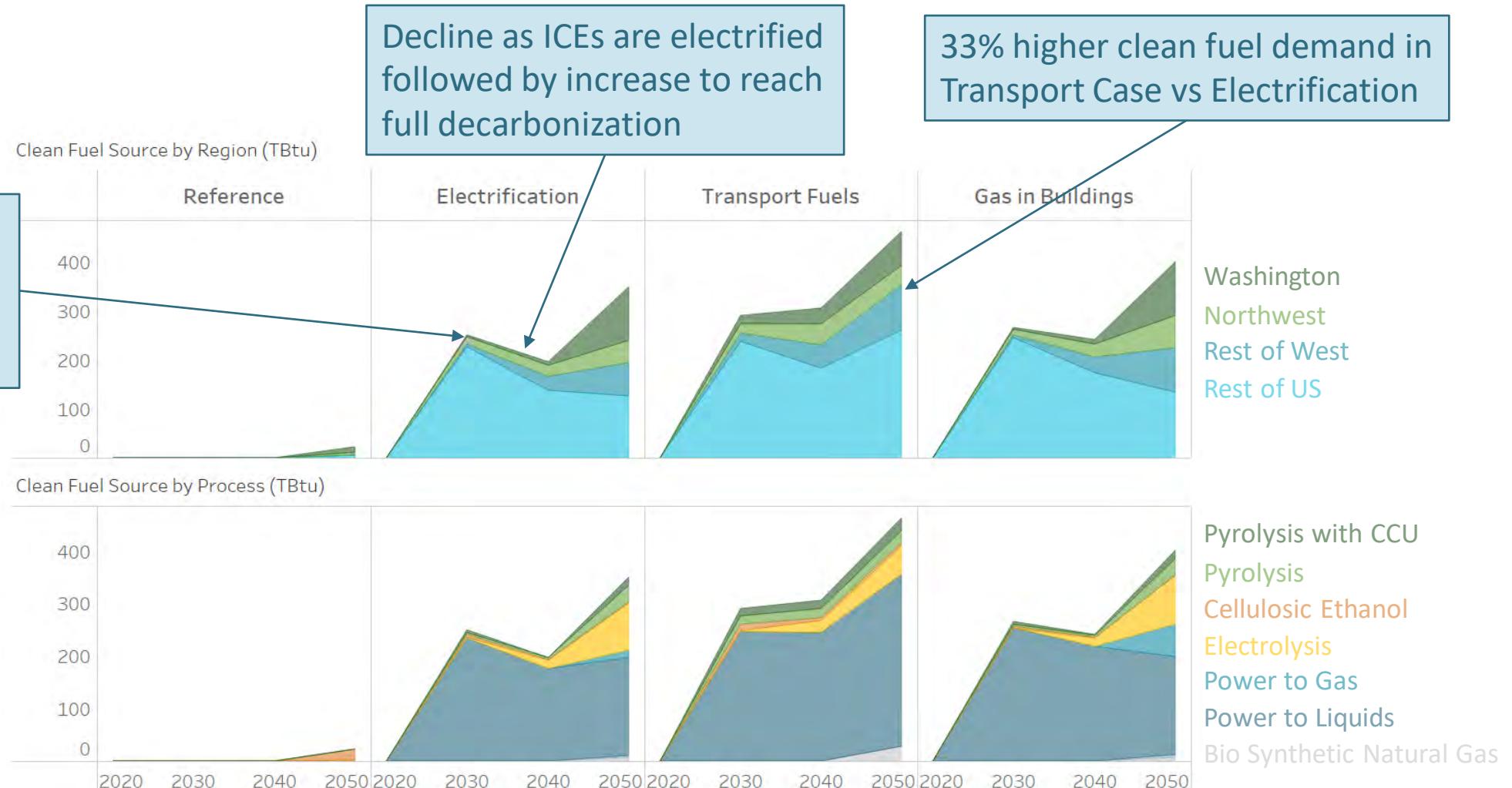
Washington starts from a clean electricity sector and needs emissions reductions from other sectors

- All liquid fuels are fully decarbonized by 2050
- Decreasing fuel consumption over time with electrification and efficiency
- Liquid fuels (gasoline, diesel, jet fuel, others) significantly decarbonized by 2030
  - Significant growth in synthetic and biofuels industries with few current commercial operations
  - Challenge for Washington to reach 2030 targets
- Hydrogen demand driven by long-haul trucking fleet
- Majority emissions in 2050 from natural gas in primary end uses



# Where do Clean Fuels Come from?

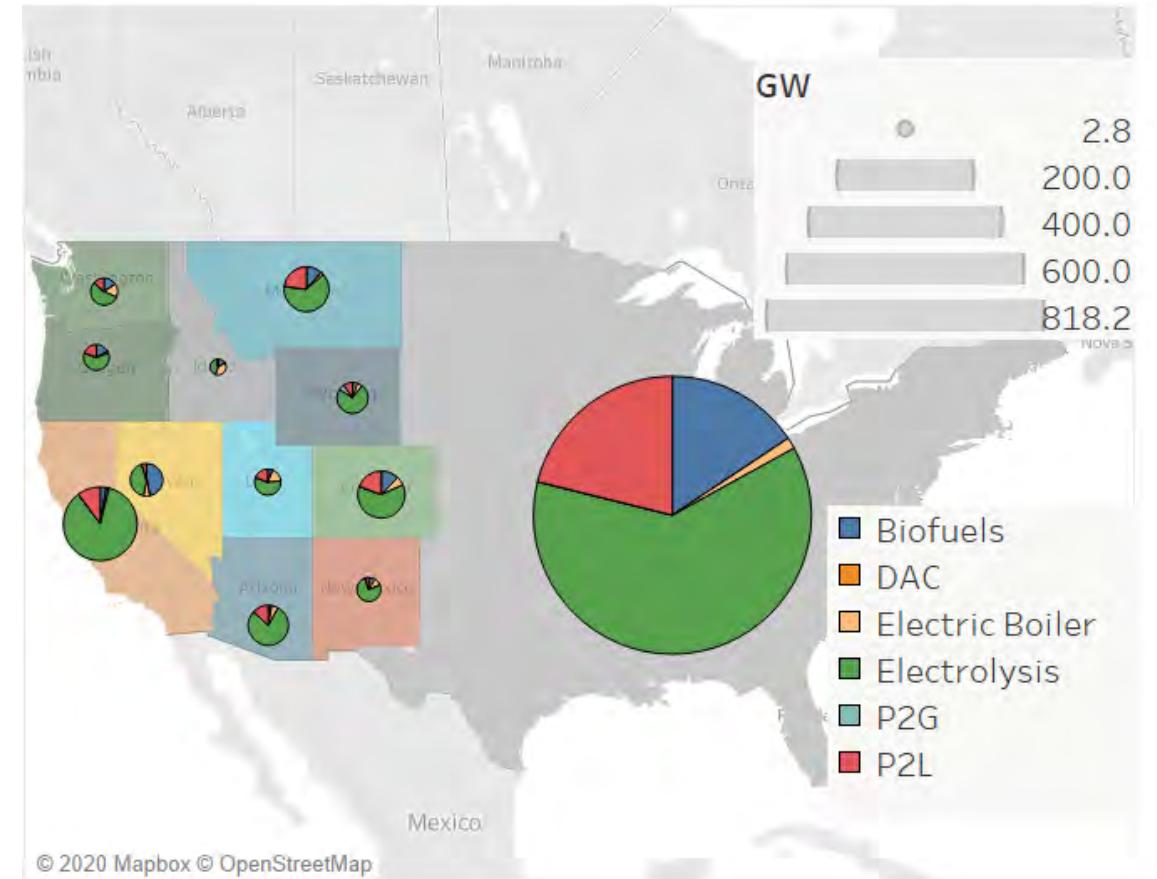
Heavy reliance on clean fuel imports from the rest of the country in Washington



# Fuels Production Capacity by 2050

National production capacity to serve US needs: Electrification Case

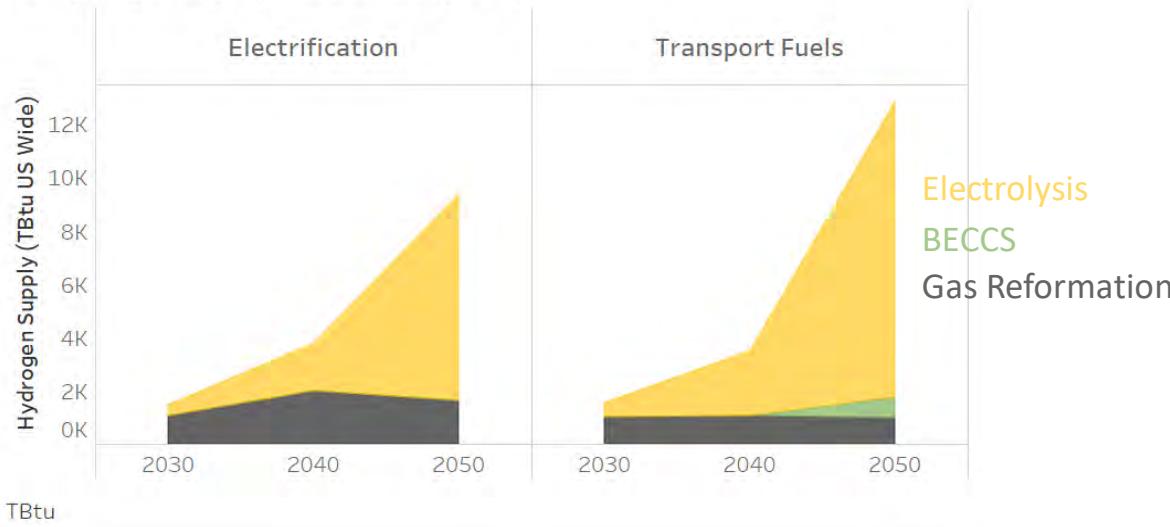
- Large total conversion capacity investment needed across the US to produce clean fuels
  - Includes demand from other states
- WA demand met with investment in fuels conversion infrastructure, biomass, and clean electricity
- Greater capacity investment needed to meet bio and synthetic fuels demand in Transport Fuels Case
  - Increased WA demand met with investment in fuels production infrastructure



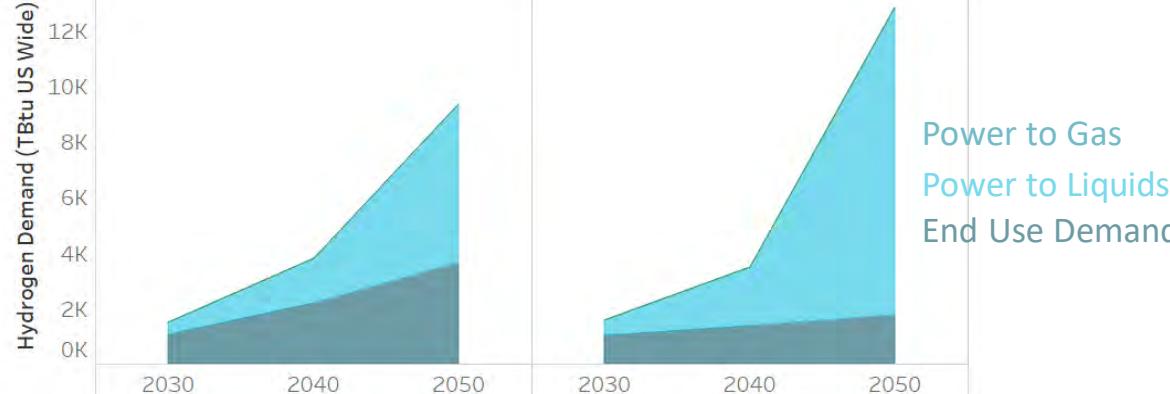
# National Fuels Industry in 2050: Hydrogen and Carbon

Building blocks of synthetic fuels, drives demand for biomass and renewable energy

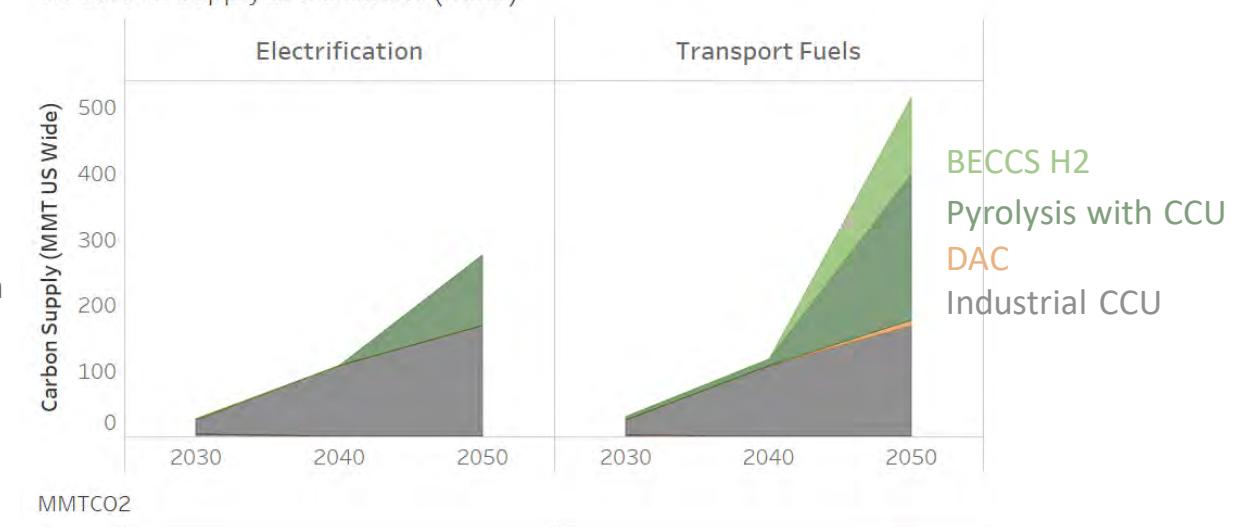
US Hydrogen Supply and Demand (TBtu)



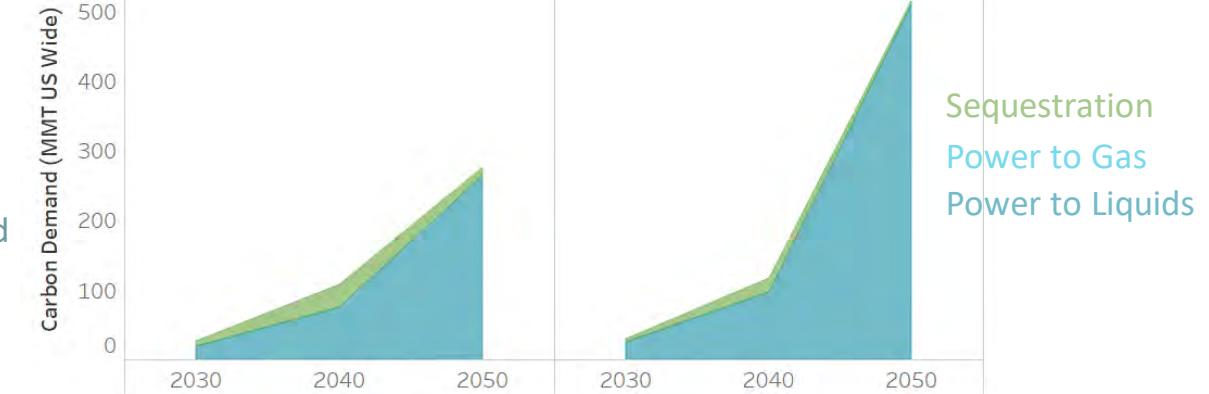
TBtu



US Carbon Supply and Demand (MMT)

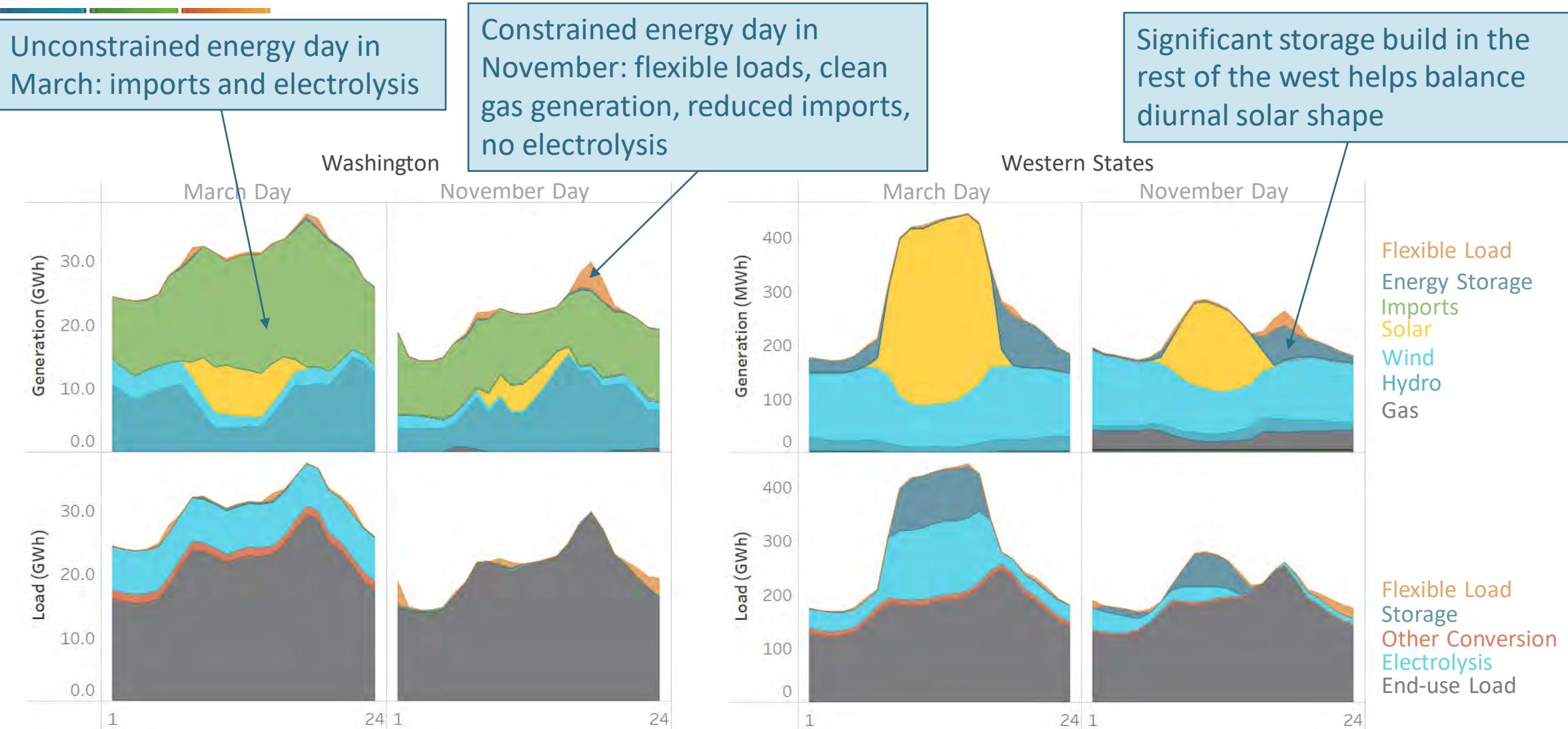


MMTCO<sub>2</sub>



# Balancing the System: High Energy and Low Energy Days in 2050

Washington relies on flexible loads, imports, hydro, and electrolysis to balance load

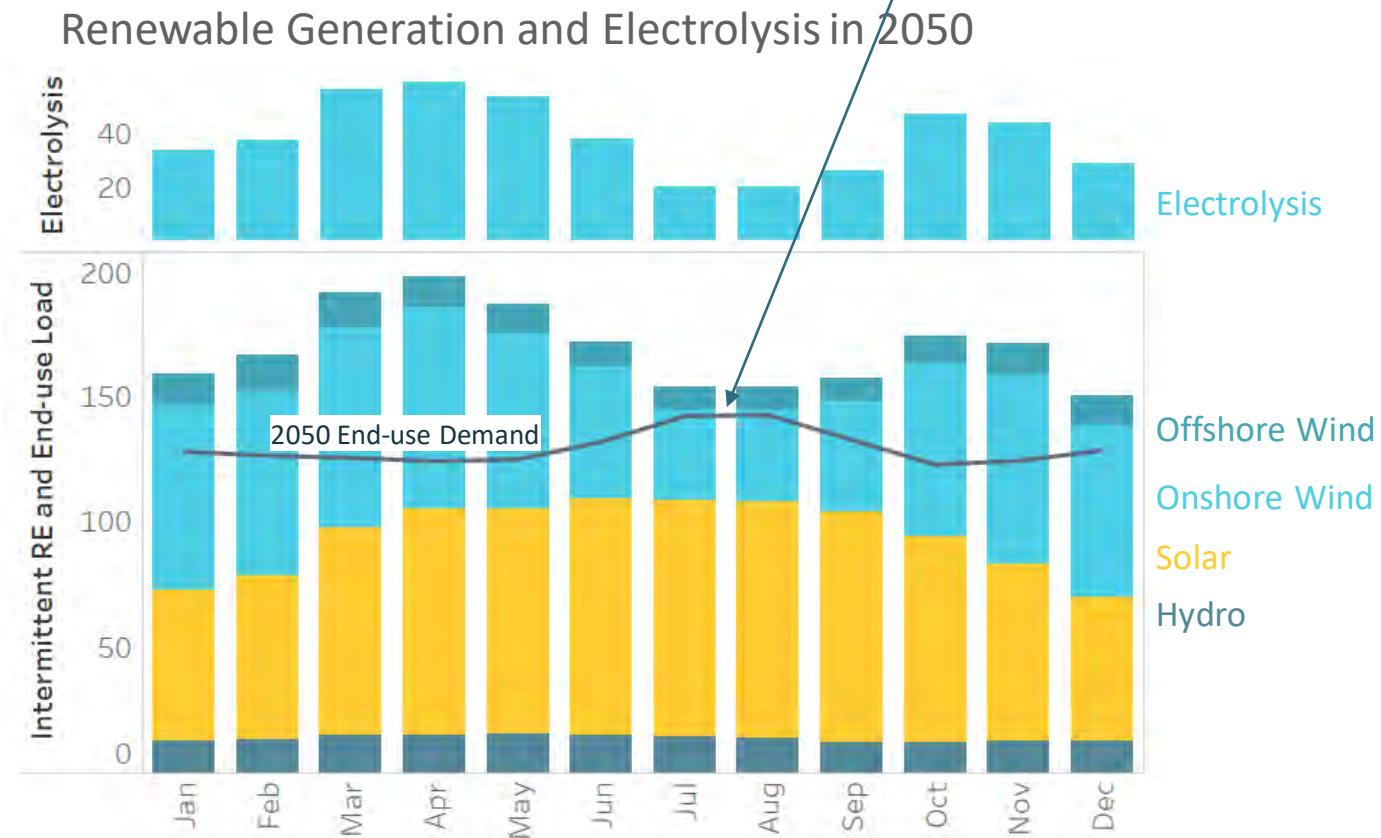


# Seasonal Balancing in 2050: West Wide

Fuels production an integral part of balancing the electricity grid in 2050

- Seasonal imbalance of intermittent renewable energy availability
  - Shifting energy across seasons difficult with current storage technologies such as lithium ion
- Clean fuels demand is an opportunity for seasonal balancing
  - Store electricity in liquid fuels
- Large flexible electrolysis loads can help balance the grid over different time scales

Peak end-use demand in 2050 coincides with lowest renewable availability and decrease in fuels production

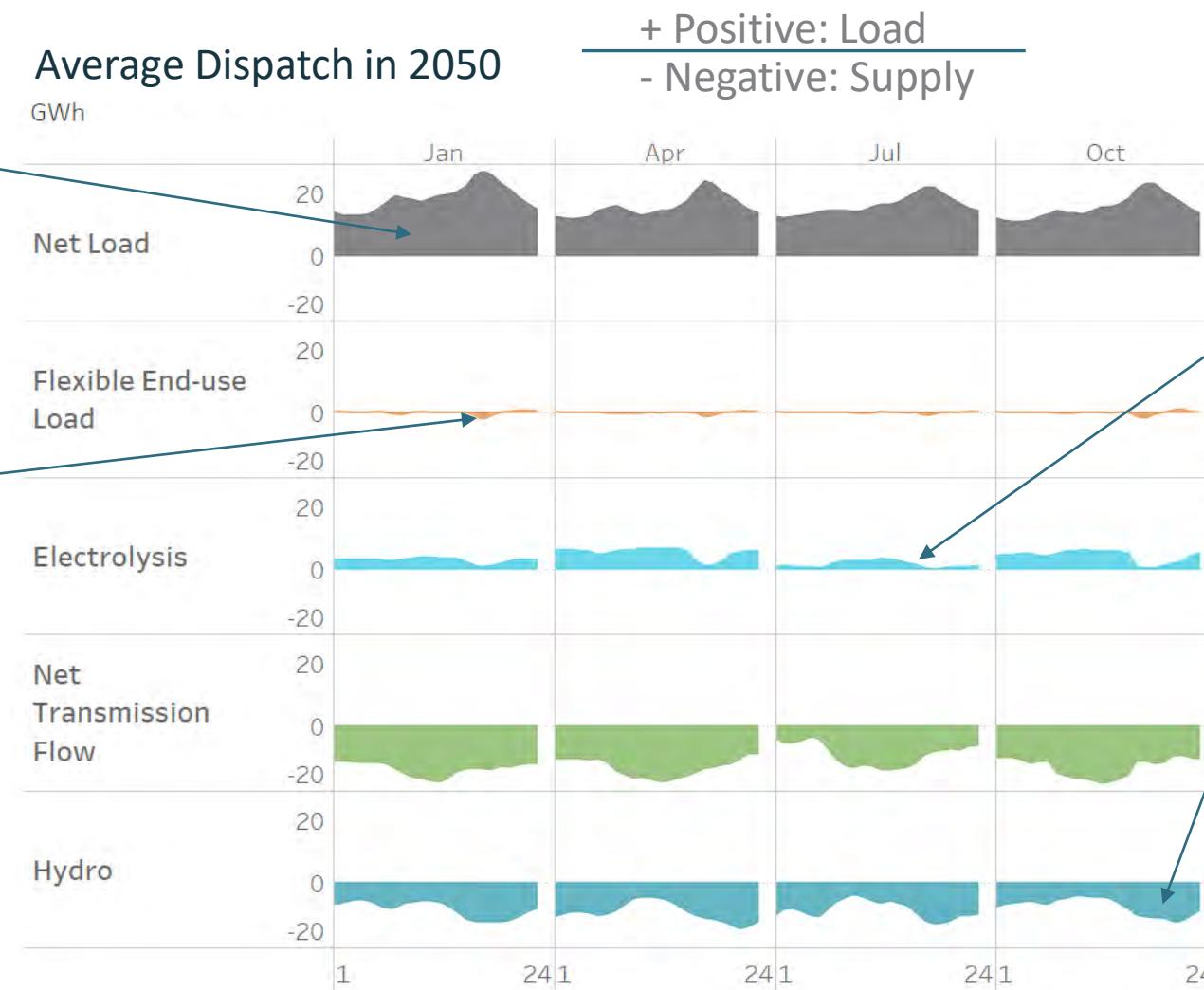


# Washington's Main Balancing Resources

Hydro, imports, electrolysis, and flexible loads are principle balancing resources in WA

Washington loads higher in the winter in contrast to the West as a whole

Flexible loads drive down peak loads



Lower summer electrolysis due to reduced imports

Hydro operated flexibly, adhering to historically observed minimum flow, ramp, and energy constraints

# Takeaways by Scenario

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- There are common trends across all of the scenarios
  - Strengthened Western grid to take advantage of resource and geographic diversity
  - Large build of solar in the Southwest and wind in the inland states
  - A large synthetic fuels industry developed based on hydrogen and carbon from electrolysis and biofuels
- The scenarios show how Washington would respond differently under different conditions
  - Transport fuels drive a 33% increase in clean fuel use in the state with reduced electricity consumption
  - Gas in buildings drives synthetic gas production not seen in other cases to ensure decarbonization goals are met
  - Behavior change reduces Washington's need for clean energy and fuels
  - Constrained resources drives additional solar build and offshore wind in Washington
- Bottom line: how much will these solutions cost relative to one another?
  - Next step in the analysis



## Key Findings

# Key Findings

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- Because Washington's electricity supply is 80% clean to begin with, decarbonizing electricity cannot play a large role in accomplishing the 2030 goal
- Even with GHG-neutral electricity under CETA, 2030 emissions target is very challenging
  - Focus must be on demand side and fuels: Energy efficiency, electrification, decarbonized fuels
  - Stock rollover of technologies with long lives raise the question of how much can be accomplished in 10 years?
- Some actions to meet 2030 target may not contribute to 2050 target
  - Diesel and gasoline use reduces dramatically with electrification of transportation by 2050
  - Infrastructure to decarbonize fuels should focus on fuels that remain in the economy through 2050

# Key Findings

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- Significant imports of clean energy from wind-rich states support Washington's electricity needs – 48% by 2050 in Electrification Case
  - Regional coordination is key to Washington and Western decarbonization
  - By how much and how fast can transmission be expanded?
- Synthetic fuels production plays a major role in decarbonizing Washington's economy as well as balancing the electricity grid
  - Both through electrolysis in the state and as part of the regional balancing solution
  - Early need for clean fuels to meet Washington targets
- 9 GW of natural gas added for reliability by 2050
- Washington state resource balancing provided by hydro, electrolysis, flexible loads, and imports as part of the integrated balancing capability of the rest of the West

# Initial Policy Direction

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- What policies can we put in place in 2020 to push as hard as possible on energy efficiency, electrifying end uses, flexible loads, and low-carbon fuels to get on the path to 2030 emissions goals and beyond?
- What policies can help develop a clean fuels industry rapidly and cost effectively?
- What are the policies that would encourage behavior changes that could be done early, fast, and cost effectively?
- What actions need to be taken to develop greater regional coordination and interregional balancing?



Thank you

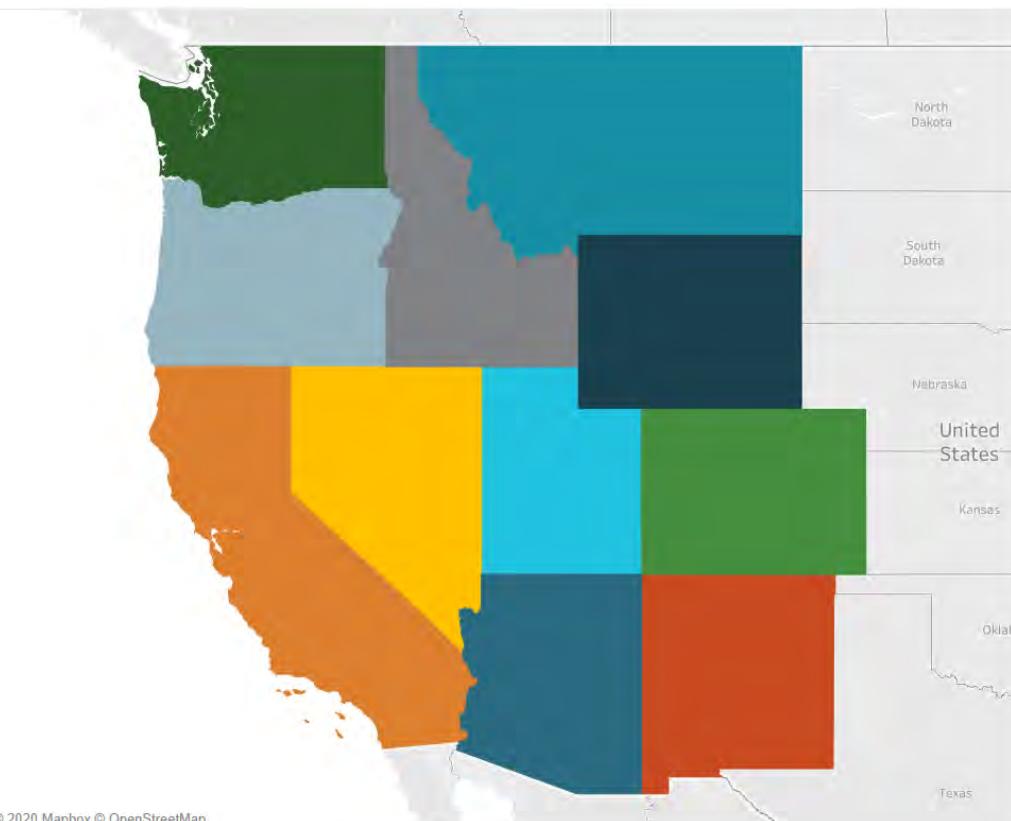
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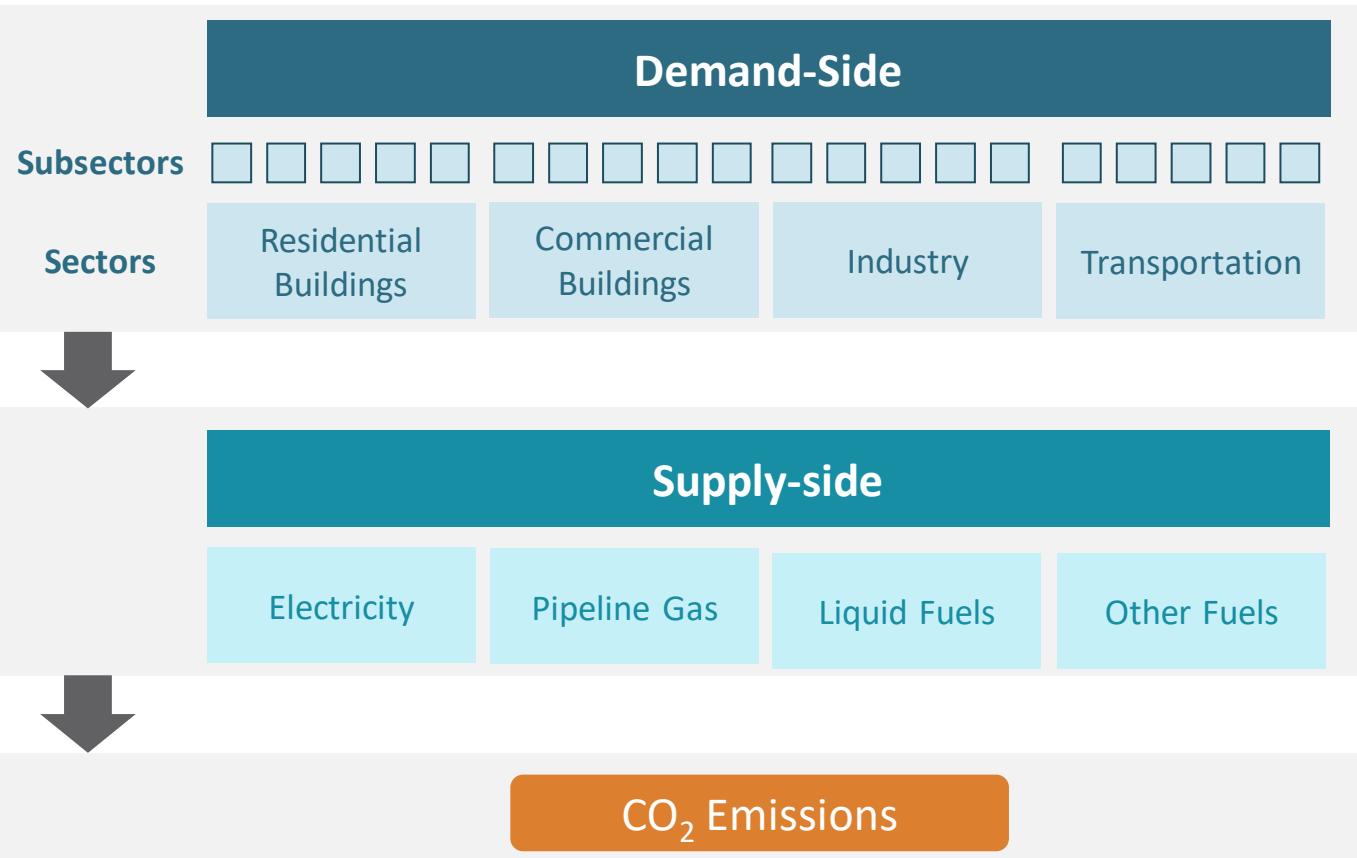
## Appendix: Study scope and methodology

# Study evaluates deep decarbonization of Washington's economy



- All energy sectors represented
  - Residential and commercial buildings, industry, transportation and electricity generation
- Regional representation
  - Other state's actions will impact the availability and cost of solutions Washington has to decarbonize
  - State representation in the west captures electricity system operations and load, transmission constraints, biofuel and sequestration potential, and competition for resources as others meet their own targets
- Remainder of the U.S.: also modeled to factor in electricity sector dynamics and the availability of renewable resources, biofuels and sequestration

# Analysis covers Washington's entire energy system



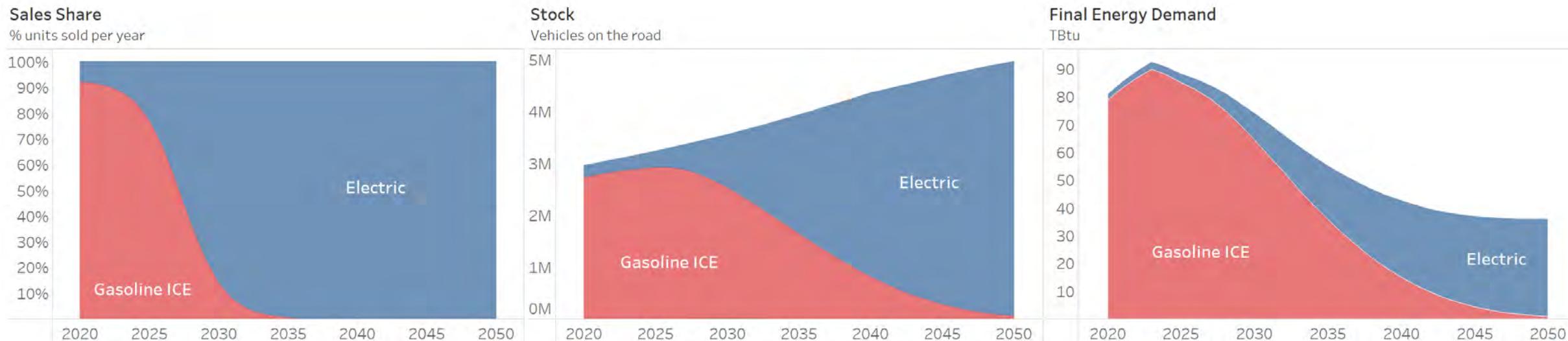
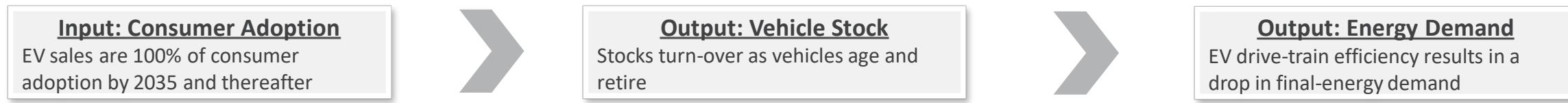
- **EnergyPATHWAYS** model used to develop demand-side cases
- Applied electrification and EE levers
- Strategies vary by sub-sector (residential space heating to heavy duty trucks)

- **Regional Investment and Operations (RIO)** model identifies cost-optimal energy supply
- Net-zero electricity systems
- Novel technology deployment (biofuels; hydrogen production; geologic sequestration)

# Demand-side modeling



- Scenario-based, bottom-up energy model (not optimization-based)
- Characterizes rollover of stock over time
- Simulates the change in total energy demand and load shape for every end-use
- Illustration of model inputs and outputs for light-duty vehicles

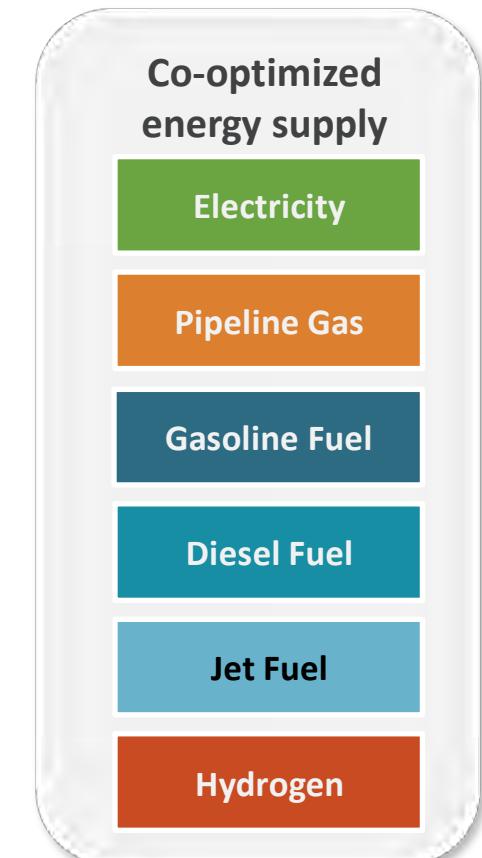


# Supply-side modeling

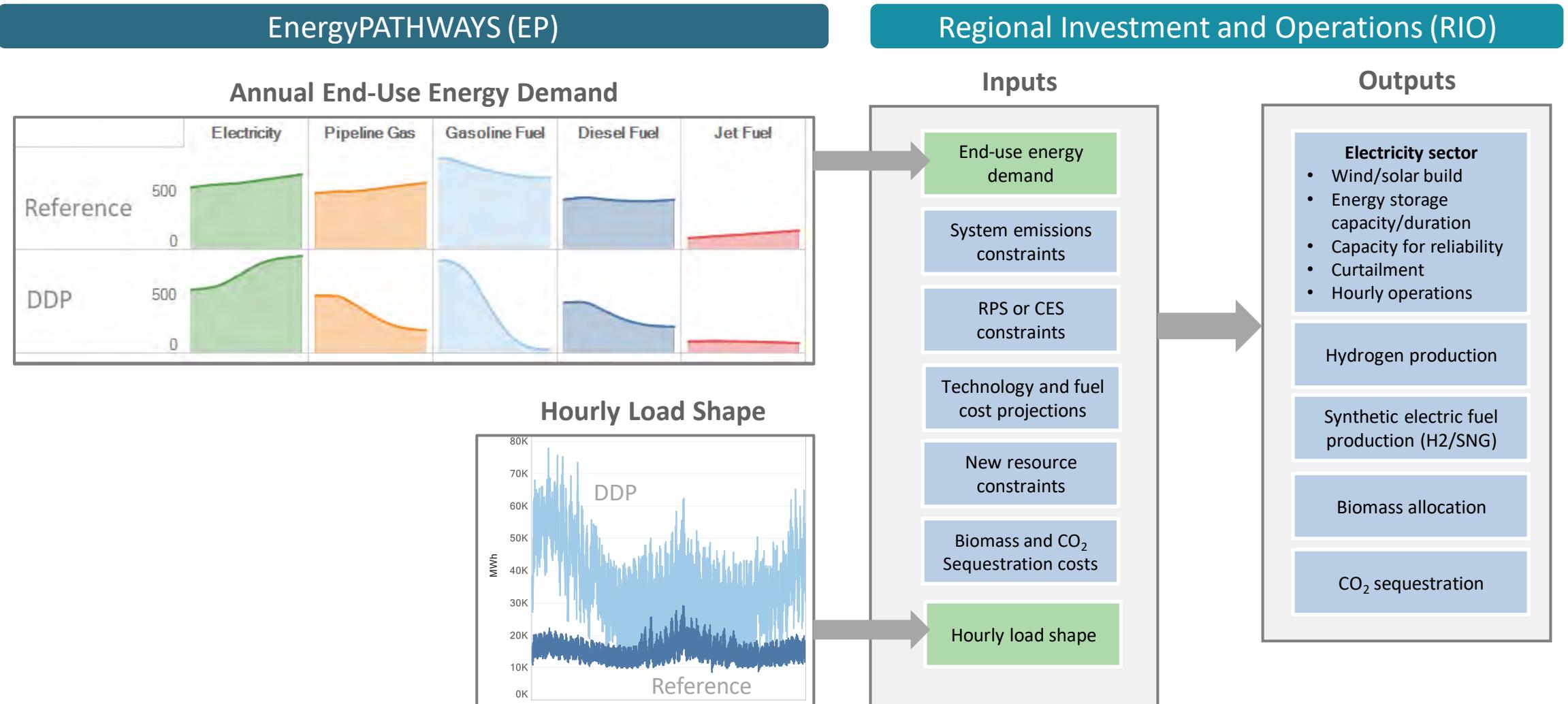
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- Capacity expansion tool that produces cost optimal resource portfolios across the electric and fuels sectors
  - Identifies least-cost clean fuels to achieve emissions targets, including renewable natural gas and hydrogen production
- Simulates hourly electricity operations and investment decisions
  - Electric sector modeling provides a robust approximation of the reliability challenges introduced by renewables
- Electricity and fuels are co-optimized to identify sector coupling opportunities
  - Example: production of hydrogen from electrolysis



# Demand- and supply-side modeling framework





## Appendix: Key Assumptions

# Demand-subsectors

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- EnergyPATHWAYS database includes 67 subsectors
  - Primary data-sources include:
    - Annual Energy Outlook 2020 inputs/outputs (AEO; EIA)
    - Residential/Commercial Buildings/Manufacturing Energy Consumption Surveys (RECS/CBECS/MECS; EIA)
    - State Energy Data System (SEDS; DOE)
    - NREL
  - 8 industrial process categories, 11 commercial building types, 3 residential building types
  - 363 demand-side technologies w/ projections of cost (capital, installation, fuel-switching, O&M) and service efficiency

commercial air conditioning	residential clothes washing	food and kindred products
commercial cooking	residential computers and related	glass and glass products
commercial lighting	residential cooking	iron and steel
commercial other	residential dishwashing	machinery
commercial refrigeration	residential freezing	metal and other non-metallic mining
commercial space heating	residential furnace fans	paper and allied products
commercial ventilation	residential lighting	plastic and rubber products
commercial water heating	residential other uses	transportation equipment
district services	residential refrigeration	wood products
office equipment (non-p.c.)	residential secondary heating	bulk chemicals
office equipment (p.c.)	residential space heating	cement
aviation	residential televisions and related	computer and electronic products
domestic shipping	residential water heating	construction
freight rail	Cement and Lime CO2 Capture	electrical equip., appliances, and
heavy duty trucks	Cement and Lime Non-Energy CO2	components
international shipping	Iron and Steel CO2 Capture	passenger rail
light duty autos	Other Non-Energy CO2	recreational boats
light duty trucks	Petrochemical CO2 Capture	school and intercity buses
lubricants	agriculture-crops	transit buses
medium duty trucks	agriculture-other	residential air conditioning
military use	aluminum industry	residential building shell
motorcycles	balance of manufacturing other	residential clothes drying

# Load Shape Sources

Shape Name	Used By	Input Data Geography	Input Temporal Resolution	Source
Bulk System Load	initial electricity reconciliation, all subsectors not otherwise given a shape	Emissions and Generation Resource Integrated Database (EGRID) with additional granularity in the western interconnection	hourly, 2012	FERC Form No. 714
Light-Duty Vehicles (LDVs)	all LDVs	United States	month-hour-weekday/weekend average, separated by home vs. work charging	Evolved Energy Research analysis of 2016 National Household Travel Survey
Water Heating (Gas Shape) <sup>a</sup>	residential hot water		month-hour-weekday/weekend average	Northwest Energy Efficiency Alliance Residential Building Stock Assessment Metering Study (Northwest)
Other Appliances	residential TV & computers			
Lighting	residential lighting			
Clothes Washing	residential clothes washing			
Clothes Drying	residential clothes drying			
Dishwashing	residential dish washing			
Residential Refrigeration	residential refrigeration			
Residential Freezing	residential freezing			
Residential Cooking	residential cooking			
Industrial Other	all other industrial loads	North American Electric Reliability Corporation (NERC) region		California Load Research Data
Agriculture	industry agriculture			
Commercial Cooking	commercial cooking			
Commercial Water Heating	commercial water heating			
Commercial Lighting Internal	commercial lighting			EPRI Load Shape Library 5.0
Commercial Refrigeration	commercial refrigeration			

# Load Shape Sources, Continued

Shape Name	Used By	Input Data Geography	Input Temporal Resolution	Source
Commercial Ventilation	commercial ventilation	IECC Climate Zone by state (114 total geographical regions)	hourly, 2012 weather	Evolved Energy Research Regressions trained on NREL building simulations in select U.S. cities for a typical meteorological year and then run on county level HDD and CDD for 2012 from the National Oceanic and Atmospheric Administration (NOAA)
Commercial Office Equipment	commercial office equipment			
Industrial Machine Drives	machine drives			
Industrial Process Heating	process heating			
electric_furnace_res	electric resistance heating technologies			
reference_central_ac_res	central air conditioning technologies			
high_efficiency_central_ac_res	high-efficiency central air conditioning technologies			
reference_room_ac_res	room air conditioning technologies			
high_efficiency_room_ac_res	high-efficiency room air conditioning technologies			
reference_heat_pump_heating_res	ASHPs			
high_efficiency_heat_pump_heating_res	high-efficiency ASHPs			
reference_heat_pump_cooling_res	ASHPs			
high_efficiency_heat_pump_cooling_res	high-efficiency ASHPs			
chiller_com	commercial chiller technologies			
dx_ac_com	direct expansion air conditioning technologies			
boiler_com	commercial boiler technologies			
furnace_com	commercial electric furnaces			
Flat shape	MDV and HDV charging	United States	n/a	n/a

<sup>a</sup> natural gas shape is used as a proxy for the service demand shape for electric hot water due to the lack of electric water heater data.

# Supply-Side Data

Data Category	Data Description	Supply Node	Source
Resource Potential	Binned resource potential (GWh) by state with associated resource performance (capacity factors) and transmission costs to reach load	Transmission – sited Solar PV; Onshore Wind; Offshore Wind; Geothermal	(Eurek et al. 2017)
Resource Potential	Binned resource potential of biomass resources by state with associated costs	Biomass Primary – Herbaceous; Biomass Primary – Wood; Biomass Primary – Waste; Biomass Primary – Corn	(Langholtz, Stokes, and Eaton 2016)
Resource Potential	Binned annual carbon sequestration injection potential by state with associated costs	Carbon Sequestration	(U.S. Department of Energy: National Energy Technology Laboratory 2017)
Resource Potential	Domestic production potential of natural gas	Natural Gas Primary – Domestic	(U.S. Energy Information Administration 2020)
Resource Potential	Domestic production potential of oil	Oil Primary – Domestic	(U.S. Energy Information Administration 2020)
Product Costs	Commodity cost of natural gas at Henry Hub	Natural Gas Primary – Domestic	(U.S. Energy Information Administration 2020)
Product Costs	Undelivered costs of refined fossil products	Refined Fossil Diesel; Refined Fossil Jet Fuel; Refined Fossil Kerosene; Refined Fossil Gasoline; Refined Fossil LPG	(U.S. Energy Information Administration 2020)
Product Costs	Commodity cost of Brent oil	Oil Primary – Domestic; Oil Primary - International	(U.S. Energy Information Administration 2020)
Delivery Infrastructure Costs	AEO transmission and delivery costs by EMM region	Electricity Transmission Grid; Electricity Distribution Grid	(U.S. Energy Information Administration 2020)
Delivery Infrastructure Costs	AEO transmission and delivery costs by census division and sector	Gas Transmission Pipeline; Gas Distribution Pipeline	(U.S. Energy Information Administration 2020)
Delivery Infrastructure	AEO delivery costs by fuel product	Gasoline Delivery; Diesel Delivery; Jet Fuel; LPG Fuel Delivery; Kerosene Delivery	(U.S. Energy Information Administration 2020)

# Supply-Side Data Continued

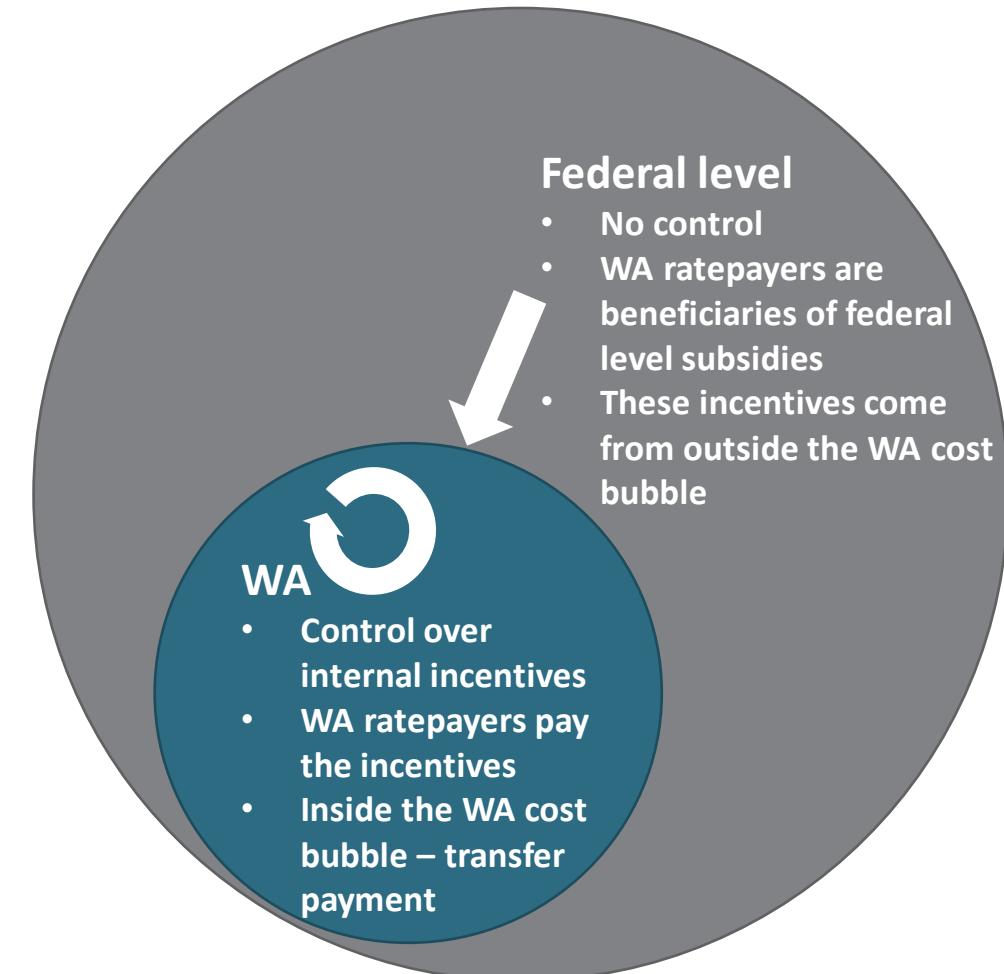
Data Category	Data Description	Supply Node	Source
Technology Cost and Performance	Renewable and conventional electric technology installed cost projections	Nuclear Power Plants; Onshore Wind Power Plants; Offshore Wind Power Plants; Transmission – Sited Solar PV Power Plants; Distribution – Sited Solar PV Power Plants; Rooftop PV Solar Power Plants; Combined – Cycle Gas Turbines; Coal Power Plants; Combined – Cycle Gas Power Plants with CCS; Coal Power Plants with CCS; Gas Combustion Turbines	(National Renewable Energy Laboratory 2020)
Technology Cost and Performance	Electric fuel cost projections including electrolysis and fuel synthesis facilities	Central Hydrogen Grid Electrolysis; Power – To – Diesel; Power – To – Jet Fuel; Power – To – Gas Production Facilities	(Capros et al. 2018)
Technology Cost and Performance	Hydrogen Gas Reformation costs with and without carbon capture	H2 Natural Gas Reformation; H2 Natural Gas Reformation w/CCS	(International Energy Agency GHG Programme 2017)
Technology Cost and Performance	Nth plant Direct air capture costs for sequestration and utilization	Direct Air Capture with Sequestration; Direct Air Capture with Utilization	(Keith et al. 2018)
Technology Cost and Performance	Gasification cost and efficiency of conversion including gas upgrading.	Biomass Gasification; Biomass Gasification with CCS	(G. del Alamo et al. 2015)
Technology Cost and Performance	Cost and efficiency of renewable Fischer-Tropsch diesel production.	Renewable Diesel; Renewable Diesel with CCS	(G. del Alamo et al. 2015)
Technology Cost and Performance	Cost and efficiency of industrial boilers	Electric Boilers; Other Boilers	(Capros et al. 2018)
Technology Cost and Performance	Cost and efficiency of other, existing power plant types	Fossil Steam Turbines; Coal Power Plants	(Johnson et al. 2006)

# Federal Tax Incentives

We include federal incentives but not local incentives

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- Federal incentives included because they benefit WA by lowering total costs
  - ITC 26% in 2020, then 10% afterwards (for commercial solar only)
  - PTC expires too soon to impact build decisions
- Any local incentives are not included because they are transfer payments and do not lower total costs
- In current policy 10% ITC is available in perpetuity. We roll off ITC in 2030, forecasting a change in policy
  - Near term support for renewable investments, driving recovery in jobs and investment coming out of Covid
  - Won't last forever, particularly as renewable prices continue to drop
  - Federal incentives may be better spent on emerging clean technologies in the future



# In-state Solar

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- NWPCC has developed estimates of rooftop solar through 2045
  - [https://www.nwcouncil.org/sites/default/files/2019\\_0917\\_p1.pdf](https://www.nwcouncil.org/sites/default/files/2019_0917_p1.pdf)
- We schedule NWPCC adoption of rooftop solar for WA through 2030 of 500 MW
  - Simulation, assumes customer behavior based on existing trends, rates etc. through 2030
- In addition, the model can select solar as part of the optimization
- Though bulk system solar is cheaper than rooftop and will be selected ahead, we do not preclude rooftop solar as part of a future resource portfolio
  - Model does not pick up all of the benefits of rooftop solar because no detailed distribution system model
  - Rooftop may be desirable for other reasons such as promoting jobs within state, or avoiding land use challenges siting bulk system level solar
- Bulk system solar potential capped using [NREL's Regional Energy Deployment System](#)

# Columbia Generating Station (CGS) Extension

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- We assume that the CGS can be extended for an additional 20 years of life at 1210 MW gross output
- Extending CGS:
  - Cost assumptions developed by Energy Northwest and consistent with NWPCC 2021 Power Plan
  - License renewal
    - \$50M extension capital cost
    - \$400M fixed O&M based on O&M estimates in the Energy Northwest Fiscal Year 2021 Budget

# Small Modular Reactors (SMRs)

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- SMRs are included as a resource option in the model for Washington State
- Costs assumptions from NWPCC 2021 Power Plan
  - <https://nw council.app.box.com/s/nnfkfiq9vuqg3umtb2e8np0tqm78ztni>
- Capital Cost: \$5400
- Earliest online date: 2030
- Maximum resource build by 2030: 500 MW
- Maximum resource build by 2050: 3420 MW
- Operating costs from NREL

# Climate impacts on load forecast

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- We investigated the climate impact assumed in the load forecasts used in the study to ensure that climate change is adequately accounted for, as it is by NWPCC
- Rhodium Group has also looked at impacts on load due to climate change by region
- EIA incorporates climate impacts into AEO based on extrapolated change in heating degree days (HDD) and cooling degree days (CDD) from the past 30 years (p17)
  - For the Pacific region, change in number of HDD: -0.7%/year, number of CDD: 1.2%/year
    - <https://www.eia.gov/outlooks/aoe/pdf/appa.pdf> (table A5)
    - Comparing to the Rhodium estimates is imperfect given the available data, however these roughly align with a continued fossil fuel use scenario (RCP8.5)
    - Increases in CDD in AEO are slightly higher than in the NWPCC work, but approximately aligned ([https://www.nwcouncil.org/sites/default/files/2019\\_0917\\_p1.pdf](https://www.nwcouncil.org/sites/default/files/2019_0917_p1.pdf) p6)
- We use the EIA AEO load forecasts because of their alignment on climate change with other forecasts and the consistency of load forecasting methodology used across the study region (though RCP8.5 is not a likely pathway with climate action taken, it is not significantly different in regional HDD and CDD from RCP4.5)

# Climate Impacts on Hydro

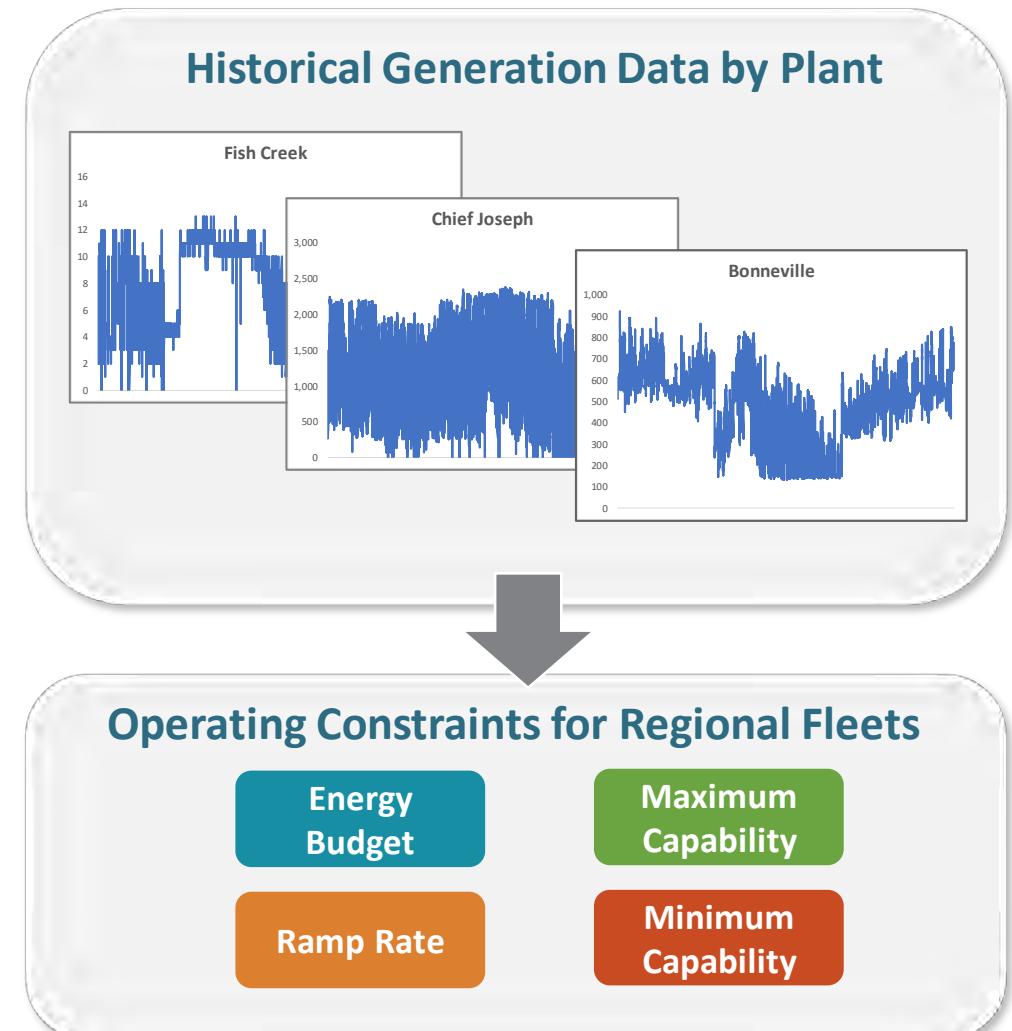
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- Seattle City Light finds no clear trend in impacts on hydro across models reviewed – some models project wetter conditions, others predict drier conditions
- Lower summer rainfall predicted (6% to 8%, with some models predicting >30%) but rainfall is very low in the summer anyway
- Predicted changes in precipitation extremes – more frequent short-term heavy rain
- Predicted reduced snowpack, increased fall and winter stream flows and reduced summer stream flows
- Not a clear path forward to adjustments in hydro availability
  - Shape changes as well as total energy availability
- More work needed to characterize this impact for future studies
- We use 3 hydro years – low, average, and high hydro energy availability to capture challenges of meeting clean energy requirements

# Hydroelectric System

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- The Pacific Northwest's hydroelectric system includes more than 30 GW of capacity, but its operational flexibility and generating capability varies year-to-year
- We model each study zone's hydro resources as an aggregated fleet and apply constraints based on historical operations
  - Maximum 1-hour and 6-hour ramp rates
  - Energy budgets
- Operational constraints for regional hydro fleets are derived using hourly generation data from WECC for 2001, 2005 and 2011, which represent dry, average and wet hydro years, respectively
  - Operational constraints vary by week of the year (1 through 52) and hydro year (dry, average and wet)



# Existing Efficiency Policy in Buildings

What are the efficiency policies that impact Reference and Decarbonization case assumptions?

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- Energy Independence Act (EIA) I-937
  - *“Utilities must pursue all conservation that is cost-effective, reliable and feasible. They need to identify the conservation potential over a 10-year period and set two-year targets.”*
- Clean Energy Transition Act (CETA)
  - Same requirement as EIA but applicable to all utilities, not just those over 25000 customers
- Clean Buildings Bill
  - Incentives and mandates applied to commercial buildings over 50000 square feet and incentives applied to multi family buildings
    - 2021-2026: voluntary incentive program
    - 2026 onwards: mandatory requirements (for large commercial buildings)
  - Require demonstration of energy reduction to below energy use intensity target
- Efficiency standards

# Modeled Efficiency

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- NWPCC work in efficiency
  - [https://www.nwcouncil.org/sites/default/files/2020\\_03\\_p2.pdf](https://www.nwcouncil.org/sites/default/files/2020_03_p2.pdf)
  - Lays out achievable potential by sector and year
  - Not directly useful for inputs
- Aggressive efficiency improvements are being driven through existing policy
  - Not modellable with the complexity of the compliance process and the way that the programs are defined
- Modeling approach: set high level targets that reasonably align with levels of ambition in Reference and other cases

# Buildings

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- Energy Efficiency
  - Reference Case: 50% sales HE by 2035, 75% sales HE by 2050
  - Electrification Case: 100% by 2035
  - Low Electrification Case: 10-year delay over electrification case, 75% sales HE by 2045
- Electrification Rates
  - Reference Case: No electrification
  - Electrification Case: NREL EFS High scenario
  - Low Electrification Case: 15% of sales electrified by 2035, 30% of sales electrified by 2045

# Renewable Resources

---

- Candidate onshore wind and solar resources
  - State-level resource potential, capacity factor and transmission costs are derived from [NREL's Regional Energy Deployment System](#)
  - Capital cost projections are from [NREL's Annual Technology Baseline 2019](#)
- We incorporate hourly profiles for wind and solar resources throughout the WECC for weather years 2010 through 2012
  - Wind profiles are from NREL's [Wind Integrated National Dataset \(WIND\) Toolkit](#)
  - Solar profiles are derived using data from the NREL [National Solar Radiation Database](#) and simulated using the [System Advisor Model](#)

# Vehicle Electrification Targets

Scenario	Class	Sub class	Target Sales Share	By Year
Electrification	HDV	long haul	25% Electric	2045
Electrification	HDV	long haul	75% Hydrogen FCV	2045
Electrification	HDV	short haul	100% Electric	2045
Low Electrification	HDV	long haul	12.5% Electric	2045
Low Electrification	HDV	long haul	0% Hydrogen FCV	2045
Low Electrification	HDV	short haul	50% Electric	2045
Electrification	MDV		70% Electric	2045
Electrification	MDV		30% Hydrogen FCV	2045
Low Electrification	MDV		35% Electric	2045
Low Electrification	MDV		0% Hydrogen FCV	2045
Electrification	LDV	autos	100% Electric	2035
Electrification	LDV	trucks	100% Electric	2035
Low Electrification	LDV	autos	75% Electric	2045
Low Electrification	LDV	trucks	75% Electric	2045
Electrification	Buses		100% Electric	2040
Low Electrification	Buses		50% Electric	2040

# Industrial Sector Targets

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- Great deal of uncertainty about industrial opportunities
  - Not a lot of information
  - Specific to industry/company/geography
  - Tied to competitiveness/labor force considerations
- Using “Keep it simple” approach
  - 1% per year improvement in energy intensity across industrial subsectors
  - Designed to model some benefits of reductions in energy efficiency while acknowledging industrial sector improvements will come from negotiation
- Maintaining industrial activity as forecast by AEO, except mining and refining
  - Refining in Washington assumed to drop by 75% from reduced fossil fuel demands

# Data Center Loads

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- Data center load not well represented in the AEO load representation of Washington
  - Updated to NWPCC data center assumptions for Washington and Oregon from 7<sup>th</sup> Power Plan
    - [https://www.nwcouncil.org/sites/default/files/7thplanfinal\\_appdixe\\_dforecast\\_1.pdf](https://www.nwcouncil.org/sites/default/files/7thplanfinal_appdixe_dforecast_1.pdf)
  - Washington and Oregon total assigned to each state based on population

# Vehicle Miles Traveled Reduction

Included in the Behavior Change Case

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- Vehicle miles traveled reductions in Behavior Change case based on consultation with Climate Solutions on their report Washington and Oregon Transportation Modeling
  - personal and freight vehicle assumptions about what reductions in vehicle miles traveled may be possible
- Overall total for the state: 29% personal VMT reduction
- Freight reduction: 15%
- We assume that people retain vehicles but drive them less, thus total vehicle numbers are not impacted

Category	Passenger Miles Traveled Reduction	Equivalent Vehicle Miles Traveled Reduction	Equivalent to Region
Urban	35%	47%	London
Suburban	35%	39%	Washington DC and London Average
Small City	15%	20%	New York State
Rural	10%	10%	CA, CT, NJ, IL

# Biomass: Updated Estimates for Woody Biomass using LURA Model

## Northwest woody biomass potential update

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- Billion Ton Study 2016 Update the default source of cost and potential data for biomass
  - <https://www.energy.gov/eere/bioenergy/2016-billion-ton-report>
  - Supply curve by state and year developed for the US, supporting modeling of a biomass and biofuels market
- Reviewed by WSU and Commerce: inadequate representation of Northwest woody biomass potential
- Michael Wolcott and team at WSU updated estimates for woody biomass in the Northwest using the LURA model for this study
  - These have been incorporated into the assumptions

# Acronyms used in this Presentation

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- BEV: Battery Electric Vehicle
- CES: Clean Energy Standard
- CETA: Clean Energy Transformation Act
- HDV: Heavy-Duty Vehicle
- ICE: Internal Combustion Engine
- IPCC: Intergovernmental Panel on Climate Change
- LDV: Light-Duty Vehicle
- MDV: Medium-Duty Vehicle
- MMT: Million Metric Tons
- O & M: Operations and Maintenance
- RCI: Residential, Commercial, Industrial
- RE: Renewable Energy
- RECs: Renewable Energy Credits
- RPS: Renewable Portfolio Standard
- SMR: Small Modular Reactor
- TBtu: Trillion British Thermal Units
- TX: Transmission
- VMT: Vehicle Miles Traveled

## **Appendix 4**

# Rocky Mountain Econometrics

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## **CRITIQUE OF THE Goldendale Energy Storage Hydroelectric Project (FERC No. 14861) NOTIFICATION OF INTENT**

Prepared for

**American Rivers**

December 3, 2019

Anthony Jones  
ROCKY MOUNTAIN ECONOMETRICS  
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## I. EXECUTIVE SUMMARY

- On January of this year, 2019, FFP Project 101, LLC, notified FERC of its intent to file an application for an original license for the Goldendale Energy Storage Project No. 14861 (Goldendale), a closed-loop pump storage project, in Washington State close to the Columbia River near to the John Day Dam.<sup>1</sup>
- In the Notice of Intent (NOI) Goldendale's stated purpose for the project is that:
  - “Within the region, renewable energy development is growing, primarily through wind power generation. The Project would provide necessary ancillary services and energy storage to the Northwest region, and allow for more reliable management and integration of disparate renewable energy sources into the grid. The Project would provide additional ramping capacity (both up and down) as well as firming for wind energy regulation, coordination, and scheduling services, automatic generation control, and support of system integrity and security (reactive power, spinning, and operating reserves).”<sup>2</sup>
- Rocky Mountain Econometrics (RME) finds that while the project may be technically able to serve in the stated capacity for a portion of each day, it will not be able to serve in that capacity for a large portion of each day when its upper reservoir has been partially or wholly used for power production and needs to be refilled. It is also extremely unlikely that Goldendale will be financially viable.
- While Goldendale's description of project operations are preliminary in nature and not overly detailed, the parameters of pump storage project operations are well understood, Goldendale's construction costs are sufficiently well defined, and the wholesale energy environment in which it will operate are clear. As a result RME is able to conclude that the Goldendale project is very unlikely to operate profitably given the state of current and future west coast and northwest energy pricing.
- As briefly as possible, Goldendale's challenge is that to service its debt and cover the cost of M&O, as well as the cost of filling its supply reservoir as a prerequisite to generate power, Goldendale will have to charge almost double the going rate of peak hour open market (NP15) energy. Worse, since pump storage project sales hours are necessarily restricted to the portion of the day when the upper reservoir is not being filled, the opportunity to absorb overhead by operating more than about eight hours per day is precluded. Finally, while Goldendale's costs of operation will likely increase with inflation over time, NW energy prices for the past two decades have been flat or declining as the market transforms to accommodate proportionally larger and larger amounts of solar power, a trend that is destined to continue.

---

<sup>1</sup> Goldendale Energy Storage Hydroelectric Project, (FERC No. 14861), Klickitat County, Washington, NOTIFICATION OF INTENT, Prepared for FFP Project 101, LLC.

<sup>2</sup> Ibid., pp. 2.

## **II. PROJECT DESCRIPTION**

From Goldendale's NOI: Goldendale Energy Storage Project FFP Project 101, LLC, FERC Project No. 14861 Page 4 January 2019

The Project area has the suitable geography for a closed-loop pumped storage facility and is strategically located at the northern terminus of the Pacific AC and DC Interties operated by BPA, Los Angeles Department of Water & Power, and the California Independent System Operator (CA-ISO).

The interties allow for the bulk seasonal exchanges of power between British Columbia, Canada, the Northwest, and California and provide benefits of coordinated markets to the regions.

The Project is also located in close proximity to substantial existing, abundant, high quality, and untapped wind power generation that can be developed with relatively low environmental conflict and cost. The Project's location can also support the daily inter-regional exchanges of California massive mid-day solar oversupply and the significant power generation ramping needed by CA-ISO.<sup>3</sup>

The proposed Project is a closed-loop pumped storage hydropower facility located off-stream of the Columbia River at John Day Dam, located on the Washington (north) side of the Columbia River at River Mile 215.6. The Project will be located approximately 8 miles southeast of the City of Goldendale in Klickitat County, Washington.

The proposed Project will involve no river or stream impoundments, allowing for minimal potential environmental impact. Initial fill water and periodic make-up water will be purchased from Public Utility District No. 1 of Klickitat County, Washington (KPUD) using a KPUD-owned conveyance system and municipal water right.

The Project facilities include:

- An upper reservoir consisting of a rockfill embankment dam approximately 170 feet high, 8,000 feet long, a surface area of about 59 acres, storage of 7,100 acre-feet (AF), at an elevation of 2,940 feet above mean sea level (AMSL);
- A lower reservoir consisting of an embankment approximately 170 feet high, 7,400 feet long, a surface area of about 62 acres, storage of 7,100 AF, and an elevation of 580 feet AMSL.
- An underground water conveyance tunnel and underground powerhouse; and
- 230-kilovolt (kV) transmission line(s).

The rated (average) gross head of the Project is 2,400 feet, and the rated total installed capacity is 1,200 megawatts (MW).

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<sup>3</sup> Ibid., pp. 4.

### **Project Characteristics**

Approximate Installed Capacity	1,200 MW
Assumed Number of Units (Variable Speed)	3
Assumed Average Static Head	2,360 feet
Assumed Usable Storage Volume	7,100 AF
Approximate Energy Storage	14,745 MWh
Approximate Hours of Storage @ 1,200 MW	12 hours

### **Underground Powerhouse**

Rated Head (Gross)	Approximately 2400 feet
Max Flow Generating Mode	8,280 cfs
Max Flow Pumping Mode	6,700 cfs
Generating Capacity	Up to 1,200 MW
Number of Units	3 x 400 MW units

### III. MARKET PRICES

Understanding Goldendale requires understanding the west coast wholesale energy market with which it will interface.

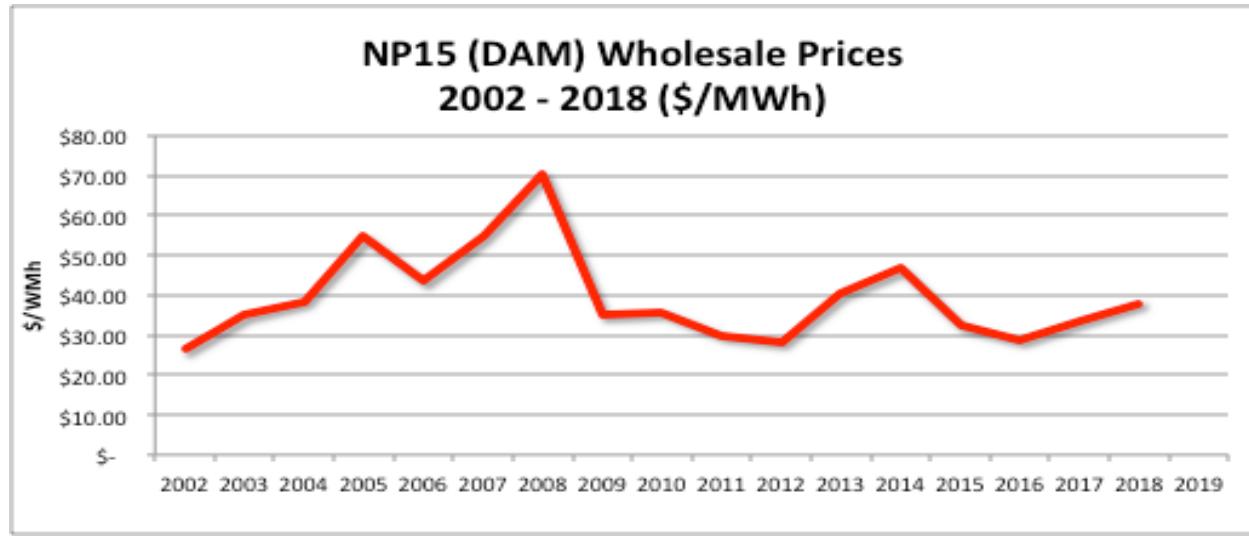
Unlike many, perhaps most, pump storage projects that are built in conjunction with a relatively fixed output, often thermal, generating station, Goldendale will be a free standing, independent operation buying and selling power on the western transmission grid, from and to the west coast wholesale energy markets.

The NOI talks broadly about supporting other regional power producers but makes no mention of contracting with any of them. For the purposes of this analysis RME assumes Goldendale will be a freelance operation, attempting to buy low and sell high on the wholesale market, to the extent of their ability, at their discretion. In the absence of contractual requirements for energy used to fill their upper reservoir or sell their production, it is to market prices that we must look to understand the forces that will shape Goldendale's potential for success or failure.

#### Pre 2009, Prelude to a Crash

In the years leading up to 2009, west coast and northwest wholesale energy prices were escalating rapidly. From 2002 through 2008, NP15 prices climbed from about \$25/MWh to over \$70/MWh, a 180 percent increase in a scant six years. In 2008, FERC, BPA, and most NW utilities were predicting energy prices to continue escalating, at a somewhat slower rate, on upward toward \$80, \$90, and \$100/MWh within 10 years.

Chart 1



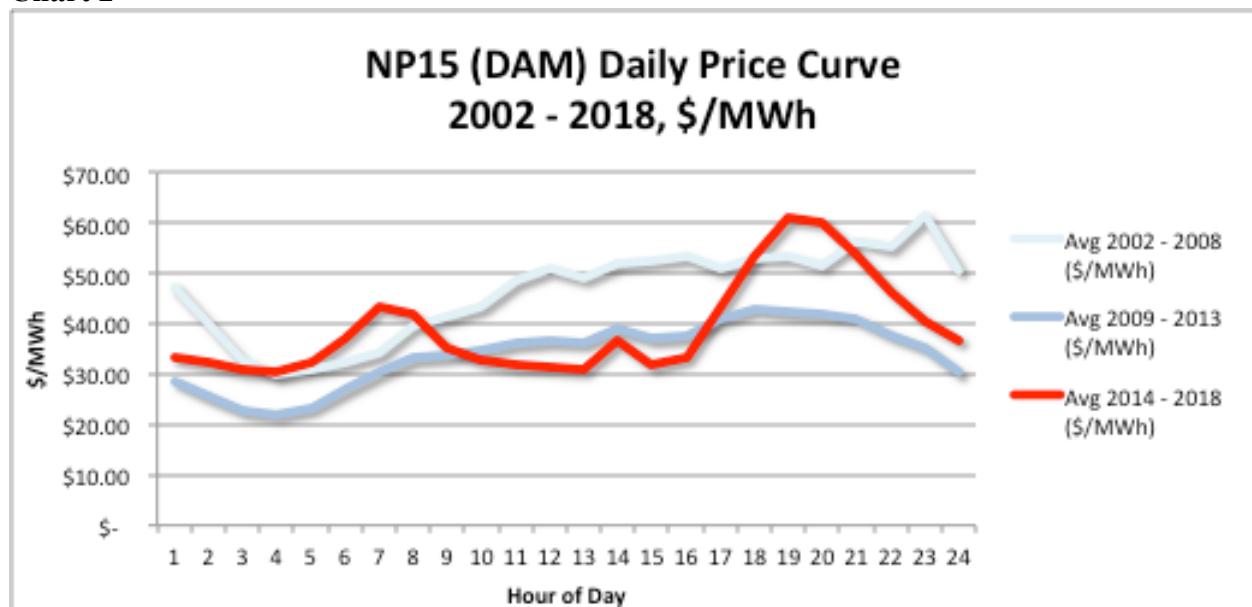
Source: CAISO<sup>4</sup>

<sup>4</sup> <http://oasis.caiso.com/mrioasis/logon.do>

That line of thinking collapsed in 2009, the first year of the Great Recession. That year saw the collapse of gas prices (a major factor in the price of power produced by gas generating plants) and the point where solar capacity in California started gaining traction. In one year, from 2008 to 2009, NP15 prices dropped by 50 percent and have never recovered to any substantive degree for more than a year or two. Nine years after the 2009 price collapse 2018 prices averaged about \$38/MWh, roughly half of price levels ten years previous. And, the 2018 number would likely have been lower still if not for the effect of the Camp Fire in California that took several major PG&E generating plants offline for several months of the year, thus reducing supply and driving prices higher. Please refer to Chart 1, above.

Prices from 2009 to 2013 followed a daily price curve similar to but lower than the daily price curve prior to 2009. Daily prices continued to bottom out in the hours from midnight to about 6:00 AM and then began climbing to a peak in the late afternoon or early evening. Where pre 2009 prices bottomed out at about \$30/MWh, post 2008 prices bottomed out about \$10 lower at \$20/MWh. Where pre 2009 prices topped out as high as \$60/MWh in the late evening, post 2008 prices topped out about \$20 lower at about \$42/MWh as early as 6:00 PM.

## Chart 2



Prior to 2009 the range from minimum to maximum price for the day averaged a little more than \$30/MWh. From 2009 - 2014 the daily average price range from minimum to maximum was about \$8 less, at roughly \$22/MWh. Please see Chart 2, above.

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<sup>5</sup> <http://oasis.caiso.com/mrioasis/logon.do>

The lower overall prices and the narrowing of total price range after 2008 was probably due to a combination of factors including reduced demand due to the recession, lower gas prices used by thermal generating plants, and the beginnings of the solar power revolution associated with California investing in renewable energy.

### **High Spot Market Prices May Not Be Enough**

If Goldendale would have made this proposal back in 2008, the year before market prices collapsed from the \$70/MWh range or higher, it would be more difficult to find fault with the proposal. Even the most respected forecaster has difficulty selling an audience on the likelihood of \$30 market prices when they looking at prices averaging as much as \$80/MWh for months at a time.

But this is not 2008 and prices have not averaged greater than \$50/MWh on an annual basis in ten years. In fact, the price collapse was fully expected. The precipitousness of the decline might seem a little severe but the price correction was completely normal. High prices, while inconvenient, are the mechanism that triggers innovation and investment in the market. They lead to new construction that results in more capacity, greater supply, and ultimately lower prices.

The run-up to 2008 was not the first of its kind and is unlikely to be the last. Similarly, price corrections such as the one in 2009 are equally as normal as the preceding price spike. It is for that reason that RME cautions against any prophesy that market prices will return to pre 2009 levels for anything more than brief periods. As Chart 1 demonstrates, 2013-2014 looked like prices were once again heading towards pre 2009 \$60 and \$70 levels. But, again, price changes of that nature are the events that trigger new investment, more construction, and more supply that drives prices back down to \$30/MWh and lower.

One final point before leaving the subject of pre-2009 high market prices. As we will see, high prices are a necessary condition for Goldendale to cover their costs construction costs, but not a sufficient condition for to cover their operating costs.

High peak hour prices are little benefit to pump storage projects if it means similarly high off-peak hour prices. Projects of this nature also need situations that increase the spread between high and low daily prices. Years like 2008 when average prices were much higher than after 2009 present a situation in which the daily price spread is potentially higher, but not necessarily as high as needed.

## **Emergence Of The Duck Curve**

Even more significant for this discussion is the transformation of the western energy market that started in about 2014. That year marked the emergence of the “Duck Curve”. The Duck Curve, named for the curve’s late in the day resemblance to the profile of a duck’s head, is the result of solar power becoming a major force in the California energy market.

Starting in 2014 prices from about 3:00 AM to about 8:00 AM returned to or even exceeded pre 2008 price levels, the difference being that by about 9:00 solar energy sources started producing in sufficient volume that prices, instead of continuing to increase, dropped back to pre-dawn levels of about \$30/MWh where they remained until about 5:00 PM when the late in the day peak begins. As with the morning peak, the late day peak is as high or higher than the pre 2009 peak but it is much shorter in duration. Again, please refer to Chart 2, above.

## **Dual Daily Supply Curves**

Classical economic theory holds that as demand increases, it shifts the demand curve to the right and the equilibrium price increases. At first glance that result would seem to be violated in the western wholesale energy markets where midday prices are now typically lower than earlier in the day even though the amount of energy demanded is substantially higher. However, the west coast currently operates with, effectively, two supply curves, a nighttime curve and a daytime curve.

Early in the day, in the first few hours of peak demand before sun-up, energy load begins to ramp up and, with the nighttime supply curve in play, prices begin to rise in response. Later in the morning, with load ramping up even further, the supply curve begins to shift to the right as solar generation comes online. This process not only counters the earlier increase in prices but also typically over-compensates and drives prices lower than they were before the sun rises.

It is this price environment in which Goldendale proposes to operate. In an effort to recharge the upper reservoir during the 10 lowest cost hours of the day, Goldendale will have to pump for five hours from about midnight to 5:00 AM, for another four hours from about 10:00 AM to about 1:00 PM, and finally for one hour at 3:00 PM.

About half of Goldendale’s pumping will occur during the relatively low priced but high load middle of the day.

In an effort to sell power during the 8 highest hourly prices of the daily load and price cycle, Goldendale will need to run its generators for an hour during the morning price peak at about 7:00 AM, and for 7 hours from about 5:00 PM through 11:00 PM. Please see Chart 3 below.

One final takeaway for the post 2008 open market price history is that inflation has been outpacing NP15 prices and that the difference between peak prices and off peak prices, as

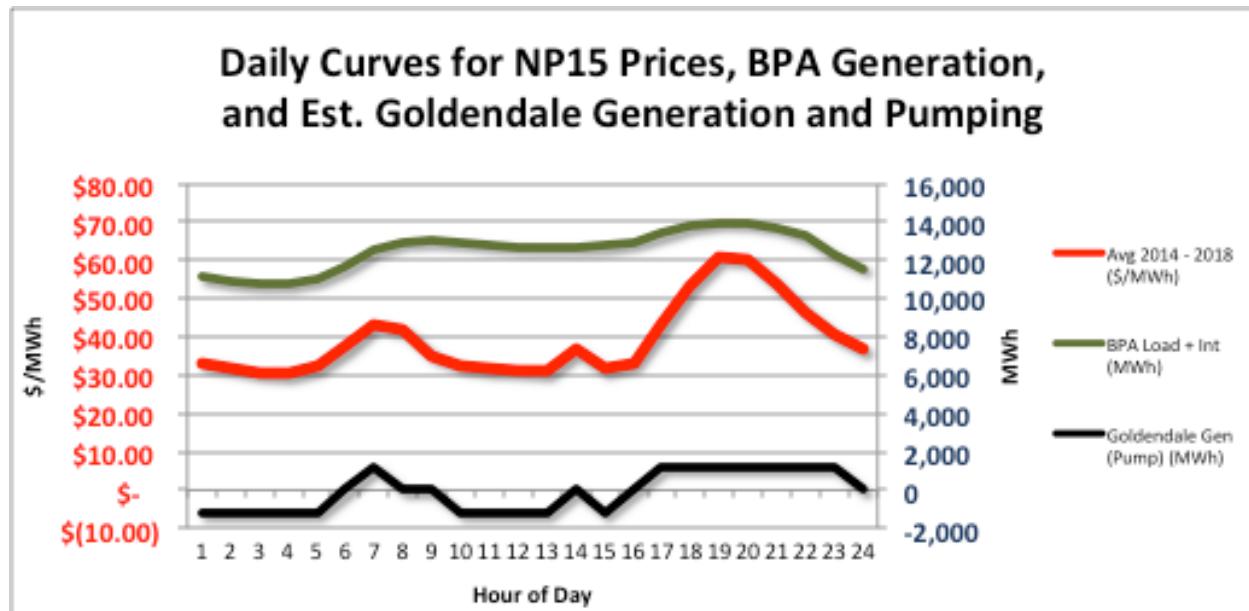
constrained by Goldendale's profit maximizing operation curve, is a relatively stable \$16 - \$18/MWh.

For the purpose of this analysis of Goldendale's finances, RME will use the 2014 – 2018 minimum and maximum prices of \$32.0475 and \$50.2530 respectively. The reason for using these two numbers is that it provides a slightly greater range in prices than the full 2009 – 2018 record provides, a factor that gives the benefit of doubt to Goldendale in recognition that they may bring more sophisticated modeling to the operation than RME has at its disposal.

### NP15 Prices

	Avg. Minimum Prices	Avg. Minimum Prices	Avg. Price Spread
2014 - 2018	\$32.0475	\$50.2530	\$18.2055
2009 - 2018	\$29.5999	\$45.9677	\$16.3679

Chart 3



## **IV. GOLDENDALE FINANCIALS**

The Goldendale NOI estimates that the project will cost \$2.2 billion. The inclusion of Washington State sales tax and capitalized pre-completion interest will bring the startup cost of the project to about \$2.6 billion. Servicing the interest on \$2.6 billion will cost Goldendale about \$208 million per year.

The NOI indicates that M&O costs will come to about 8.5 million per year, bringing the total for debt service and M&O to about \$216 million per year, roughly \$62/MWh without accounting for pumping costs.

### **Goldendale - With Amortization**

#### **Capital Cost**

PAD Cost Estimate	\$2,200,000,000	1
WSST @ 6.5%	\$143,000,000	2
Total Estimated Direct Cost	\$2,343,000,000	
Pre Cost Interest (60 Months)	\$246,310,804	3
Installed Cost	\$2,589,310,804	

#### **Maintenance and Plant Cost**

Cost	\$2,589,310,804	
Interest Rate	5.0%	5
Term (Yrs.)	20	6
Annual Interest Pmt.	\$207,772,998	

Wages	\$3,860,000	1
Other	\$4,620,000	
M&O	\$8,480,000	1
Total	\$216,252,998	

Based on Goldendale's estimates in the NOI, the project will produce about 3.5 million MWh of energy. At an estimated peak-hours average price of \$50/MWh for the 8 highest NP15 daily prices, Goldendale will see revenues of about \$175 million per year.

Also from the NOI, Goldendale will use about 4.4 million MWh each year to power its pumps to fill the upper reservoir. At average market prices for the 10 lowest priced NP15 daily hours Goldendale will have to pay an average of about \$32/MWh and will spend about \$140 million in pumping costs each year.

The relatively narrow differential between peak and off peak market prices, combined with the 20 percent efficiency penalty associated with pumping, Goldendale will net about \$35 million per year at the cash flow level. However, M&O costs and debt service will lead to Goldendale losing about \$181 million per year, a loss of \$52/MWh of production.

#### **Cash Flow From Operations<sup>6</sup>**

##### **Generation**

Capacity	1,200	4
Hrs / Day	8	4

Days /Yr.	365	4
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Annual Prod (MWh)	3,504,000	4
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Generation \$/MWh	\$50	3
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Revenue from Generation	175,200,000	
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##### **Pumping**

Pumping Rate	1,200	4
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Hrs / Day	10	4
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Days /Yr.	365	4
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Annual Pumping (MWh)	4,380,000	4
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Pumping \$/MWh	\$32	3
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Annual Pumping Cost	140,160,000	
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<b>Net Cash Flow from Operation</b>	\$35,040,000	
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<b>Profit (Loss)</b>	<b>(\$181,212,998)</b>	
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Cost of Production (\$/MWh)	\$101.72	
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Profit (Loss) \$/MWh	<b>(\$51.72)</b>	
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<sup>6</sup> Goldendale, PAD, pp 182; <http://www.salestaxstates.com/sales-tax-calculator-washington/>; RME; and Goldendale, PAD, pp 18.

To summarize, the minimum cost to cover debt service and O&M is about \$61/MWh. The minimum market price spread for Goldendale to cover its pumping costs is 20 percent above the price Goldendale pays to fill the upper reservoir. Combined, for Goldendale to operate profitably it needs to see market prices of \$61/MWh plus a price spread of about \$8/MWh on top of the \$32/MWh<sup>7</sup> estimate for the lowest cost 10 hours of pumping. Thus, with the lowest 10 hours of a typical day averaging about \$32/MWh, efficiency losses will increase the value of water in the upper reservoir to about \$40/MWh. Adding the \$61.72/MWh necessary to cover debt service and O&M means Goldendale will need to see average prices for the 8 highest priced hours of the day of \$102/MWh or higher.

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<sup>7</sup> With efficiency losses of 20% \$32/MWh pumping costs equate to \$40/MWh at the generating level.

## **V. GENERAL DISCUSSION**

### **Large Producer**

Unlike many hydro type power producers that typically only run at full capacity during spring runoff or brief moments to match peaking demand, Goldendale can be expected to run at or near full capacity for most of its daily 8-hour operation as it attempts to maximize revenue.

When generating, Goldendale output will be one of the larger single-plant power sources in the northwest. It will be capable of out producing Bonneville Dam for the eight hours per day it generates. In terms of nameplate capacity it will be larger than McNary Dam. In terms of average production, when running, it will be on par with Chief Joseph dam and second only to Grand Coulee in the NW.

### **Larger Consumer**

During the 10 hours per day that Goldendale will be pumping, it will be a major load center. When pumping, Goldendale will have the load equivalent of about 720,000 households, about the same as the all the residential households in Idaho!<sup>8</sup>

### **Net Consumer of Electricity**

Goldendale estimates that the project is 20 percent less efficient in pumping mode than it is in generating mode. The result is that to produce 3.5 million MWh of electricity Goldendale will consume about 4.4 million MWh, an annual loss to the system of about 877,000 MWh.

### **General Operating Characteristics**

Goldendale combines some of the features of a hydro project and some of the features of a thermal project and some features unique to pump storage projects.

Like any substantial hydroelectric generating plant, Goldendale's will be a major capital investment. Servicing the interest payment on its debt will be a major challenge. In the absence of high prices in the wholesale energy market, the alternative method for absorbing overhead is

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<sup>8</sup> Goldendale will consume 1,200 aMW in pumping mode. Idaho has about 720,000 residential electrical customers who consume an average of about 1,200 KWh per month. (720,000 Residents X 1.2 MWh/month = 864,000 MWh. 864,000 MWh / 30 Days / 24 Hours = 1,200 MWh

to operate as many hours per year as possible. That, combined with minimal marginal operating costs, is the reason most hydro facilities operate as close to 24/7 as possible.

However, a 24/7 generating schedule will not be possible in Goldendale's case.

The requirement to spend more time filling the upper reservoir than time generating energy, plus potentially waiting out shoulder hours when the price differential is insufficient to cover pumping losses, tends to limit Goldendale's capacity utilization rate to about 33 percent. If Goldendale could generate power 16 hours per day it could double its overhead absorption and cut its pre-pumping cost of production by half. However, again, that will not be possible.

Like a thermal project, the water in the upper reservoir has value in that it costs money to pump the water the 2360 vertical feet up from lower reservoir. Like a thermal project, Goldendale cannot generate electricity profitably unless it receives at least as much per MWh as the water in the upper reservoir cost to pump it up there, plus the 20 percent efficiency penalty.

If it cost \$40/MWh to fill the reservoir (\$32/MWh plus a 20 percent efficiency penalty for a total of about \$40 /MWh generating equivalent.), that tends to suggest that the cost minimizing operation level is when sales prices are \$40/MWh or higher. That logic works well enough until about 5:00 in the afternoon when the need to absorb overhead starts to conflict with the need to cover pumping costs. In other words, just because it cost \$40/MWh to fill the reservoir on one day does not mean the same water will be worth the same amount the next day. If, having paid \$40/MWh to fill the reservoir there is no guarantee peak prices the next day (or the day after that, ad infinitum) will not be even lower. In that event Goldendale would be smarter, toward the end of the day, to treat the pumping costs as sunk costs and produce as much power as possible during the late afternoon / evening peak price period in an effort to absorb overhead cost, to the extent possible.

In that manner, Goldendale would cover some of its overhead and recoup at least a portion of the day's pumping cost prior to beginning the next day of operation.

Clearly, no project of this type can profitably operate in that manner on a continuing basis, but it serves to illustrate the complex nature of Goldendale's business model as it attempts to minimize losses and maximize profits.

Finally, unlike the vast majority of both thermal and hydro projects, Goldendale will never be more than about 12 hours from running out of "fuel", exhausting the water in the upper reservoir, and having to stop generating electricity.

## **Emergency Generating Capability**

Goldendale's data table claims that the plant's approximate hours of storage @ 1,200 MW is 12 hours. The implication seems to be that Goldendale will provide 12 hours of backup for a variety of ancillary services including emergency generation in the event some other project fails.

This claim fails for a variety of reasons. First, if 1,200 MW generation requires 8,280 cfs of water flow, the 7,100 acre foot reservoir will be exhausted in a little over 10 and hours, not 12. But that misses the second and broader point, the assumption that any event triggering the need for 12 hours, or 10.5 hours, of Goldendale production will occur when the upper reservoir is at full capacity.

Barring the unlikely event that Goldendale is paid to sit patiently, 24/7, with a full upper reservoir laying in wait for a moment when its services are needed, it seems far more likely that any emergency calling for Goldendale's services will happen when the project has already been generating for some period of time. Clearly, the length of time that Goldendale can provide backup is directly proportional to the amount of water remaining in the upper reservoir.

Assuming Goldendale operates a daily pumping and generating schedule consistent with maximizing revenue from the daily price swings, any emergency calling for Goldendale's production is most likely to occur when the upper reservoir is substantially depleted. If any emergency happens after Goldendale is more than 4 hours into its daily generating cycle, or fewer than 5 hours into its daily pumping cycle, the upper reservoir will be half empty. In that manner, if emergencies happen at random times of day, the expectation is that Goldendale's ability to respond to emergencies is only about 6 hours, not 12.

Finally, if some other power plant were to go offline and need backup while Goldendale is already in generating mode as part of its daily production schedule, it is not clear that there will be a benefit to the system if Goldendale ceases putting power onto the grid under its own name to begin putting power onto the grid in the name of some other power producer. This scenario results in a zero net increase in production.

## **Market Price Impacts**

Classical economics suggests that, at the margin, Goldendale will drive off-peak prices up and peak prices down.

Traditionally, pump-storage projects have been built in conjunction with other specific generation projects in an attempt to extend the efficiency range of the main generating plant into other parts of the day, week, month, or year.

That description does not apply to Goldendale as presented in the NOI.

Goldendale, as currently proposed, is not linked to any individual power producer, or group of power producers. It will be a parasitic operation in that it will attempt to purchase power from other existing regional suppliers during the lower cost portions of the daily price curve in an effort to resell the energy later in the day when prices are relatively higher.

Regional power producers will hope the potential for higher off-peak prices they receive when Goldendale operates its pumps will be enough to offset the potentially lower peak prices they will see later in the day when Goldendale is producing power.

On the other side of the equation, Goldendale will hope its potential to drive up off-peak prices and the potential amount it will drive down peak-prices will not narrow the price spread to the point that they cannot operate profitably.

Finally, retail consumers will hope that the net reduction in supply and the resulting potential increase in energy costs will not adversely affect their retail rates.

### **Minimal Price Impact**

Goldendale will be one of the regions larger power producers when generating and one of the regions larger load center when pumping. As mentioned in previous sections, that tends to suggest that Goldendale will depress market prices when generating and increase wholesale prices when pumping, at least at the margin. The amount of these effects is hard to predict but will probably be fairly small.

The reason the effect will likely be small is that, while Goldendale will be a major northwest load center when pumping and a large northwest power producer when generating it will not be a large producer or load center by California standards, and it is the California wholesale markets that are the price setters.

People in the northwest tend to forget that California utilities are sized to supply the peak needs of about 40 million people while northwest utilities are sized to serve the peak needs of about 13 million people.

Goldendale may be as much as five percent of northwest capacity when generating but it will be only about one percent of California capacity. Since Goldendale will be directly connected to the west coast wholesale markets by way of the west coast power grid Goldendale will be a price taker in most cases rather than a price setter.

## **Self-Defeating Market Price Impact**

While any market price impact resulting from Goldendale's operation will likely be small, any effect will be self-defeating for Goldendale's needs.

For example, in its analysis of Goldendale's potential profitability RME estimated peak hour and off-peak hour prices would average \$50/MWh and \$32/MWh respectively. If Goldendale's operation reduces peak hour prices by \$1 and raises off-peak hour prices by \$1, to \$49 and \$33/MWh respectively, the resulting \$2/MWh narrowing of the daily price spread will reduce Goldendale's annual net revenue by nearly \$8 million and increase its per MWh loss by over \$2/MWh to \$53.97/MWh.<sup>9</sup>

## **“Quick Response” May Not Mean Lower Rates.**

Goldendale lists “quick response time” as one of the project’s assets. It is not clear to RME that this is a net benefit to the region.

From Goldendale’s perspective, its proposed ability to supply power in response to “emergency” changes in load and or reduce the supply of power as necessary to help balance system load, is a benefit to the system.

However, quick response time can just as easily be used to respond, pumping or generating, in efforts to grasp low cost pumping opportunities or switch to generating mode to take advantage of fleeting moments of high wholesale prices. Responding to emergencies may be a benefit to the system but chasing momentary price changes can increase chaos, uncertain, and risk, and be detrimental to the system.

For instance, Goldendale has the potential to switch from consuming 1,200 MW per hour in pumping mode to producing 1,200 MW per hour in generating mode, and vice versa, in an unspecified but presumably brief period of time, perhaps as quickly as a few minutes or even quicker. To other entities on the grid, power producers, energy aggregators, and consumers, this would be seen as a 2,400 MW swing in load volume, the equivalent of a substantial western city suddenly going off line, or Grand Coulee switching arbitrarily off and on, with little or no warning!

Given Goldendale’s precarious financial situation, and in the absence of regulatory or contractual operational constraints, increased wholesale market chaos appears to be the most likely result of Goldendale’s operation.

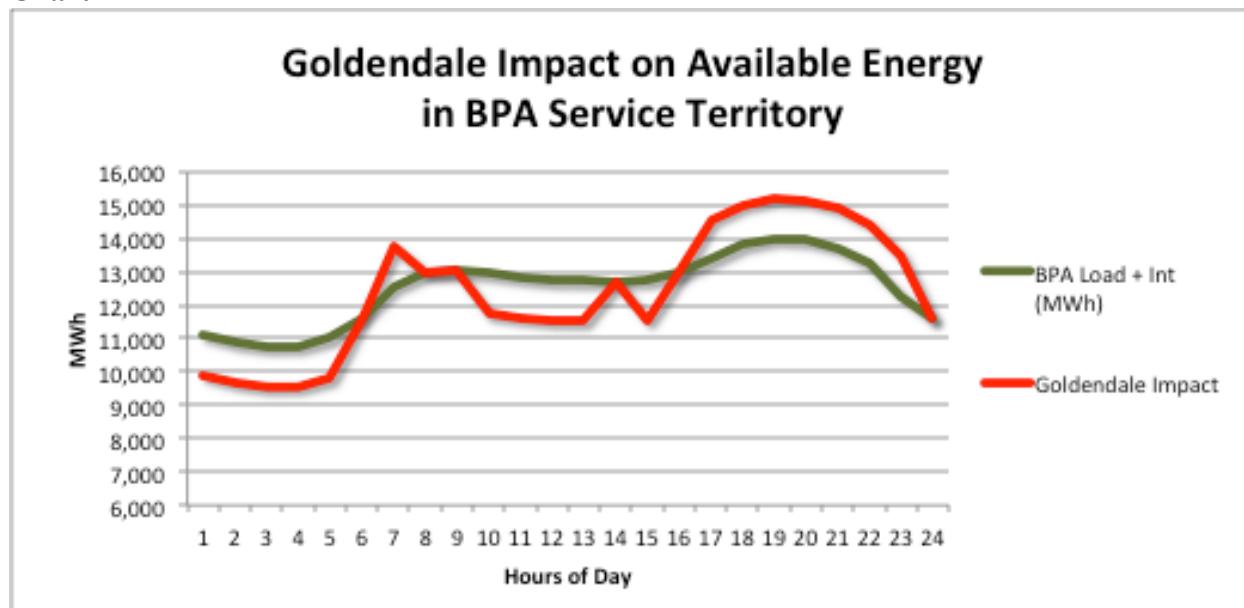
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<sup>9</sup> RME is highly skeptical of Goldendale’s potential to operate profitably. However, by choosing options and assumptions that tilt the scale in Goldendale’s direction, and not including price impacts such as this, RME generally gives the benefit of the doubt to Goldendale.

Chart 4 below provides a graphical example of this discussion. If Goldendale's operation were grafted onto BPA's load curve<sup>10</sup> it would make BPA's available power curve substantially less "smooth" and it would make the spread, the range of power, from low point to high point, available to consumers broader by about 2,400 aMW. The power currently available to contract customers exemplified by the green line, would instead follow the red line.

Would NW producers modify their production in recognition that Goldendale is operating in that fashion? The answer is undoubtedly yes, to at least some degree. However, it is important to remember that the curve shown by the green line is the result of BPA servicing load as well as chasing the same daily price curves in search of higher revenues as Goldendale will be chasing. In other words, yes, Goldendale's operation will cause changes in the operations of other NW utilities, but it is not clear that the result will smoother or less chaotic. Absent any regulatory or contractual mandate, the opposite seems most likely.

**Chart 4**



As hinted at in the preceding paragraph, regulating the manner and the degree, the when and the how much if you will, to which Goldendale can enter the market could conceivably alleviate the potential for Goldendale to increase market uncertainty. That, of course, would reduce Goldendale's ability to profit from swings in market demand and prices, and make their already precarious financial picture look even worse.

<sup>10</sup> BPA is used here because their production numbers are roughly half of the NW, they are readily available and transparent. The inclusion of the remaining NW producers would tend to minimize this impact to some degree, but not eliminate it.

## **Contracting**

As mentioned above, Goldendale is not directly linked to any one, or any group, of generating entities. As currently configured, it is a freelance operation.

To that end power producers in need of load shaping services may look to Goldendale for assistance. The question then becomes whether or not Goldendale can compete with other regional load shaping service providers. The evidence suggests not.

Again, Goldendale's breakeven production cost exceeds \$100/MWh.

Competing with Goldendale will be most of the other NW entities with excess capacity, particularly utilities with hydro power plants that have some potential to shift their time of day production schedules. This will include BPA that touts its load shaping ability for around \$40/MWh. Other hydro intensive utilities such as Idaho Power and Avista offer similar services for roughly similar prices.<sup>11</sup>

For companies looking for load shaping services but hoping to avoid fixed contracts there is always the option of playing the same wholesale market as Goldendale. Here, the prices may be more volatile than would be seen with a fixed contract, but with average daily prices of around \$30/MWh it is hard to find justification for \$100 Goldendale power.

Finally, Goldendale will have to compete with new power producers that are increasingly entering the market with rates as low as \$20/MWh, including battery backup. This might seem especially galling to Goldendale since Goldendale will have trouble filling its upper reservoir for \$20/MWh, let alone generating power that inexpensively.

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<sup>11</sup> And, those prices may be a bit high. CAISO staff concludes load shaping in California only adds about \$0.85/MWh to market prices. For this analysis that means Goldendale, with its \$100+ / MWh cost structure trying to compete with \$33/MWh market prices.

## **VI. APPENDIX – ALTERNATIVE DEBT STRUCTURES**

### **Goldendale Without Amortization**

In recognition that it is fairly common for utilities to not amortize debt on major projects, RME looked at the affect of Goldendale limiting its debt service to paying only the interest on the \$2.6 billion startup cost. This has the benefit of reducing the debt service charge by \$75 million from \$219 million to about \$144 million per year. Carrying the \$75 million annual cost reduction through to the bottom line reduces Goldendale's losses from \$192 million to \$117 million per year, a loss of \$33/MWh of production.

### **Goldendale With Bankruptcy**

In the forgoing analysis RME used assumptions generally favorable to Goldendale. For example, for the market price spread, RME used the 2014 – 2018 spread of \$18/MWh. The 2009 – 2018 spread is perhaps more relevant, but with a spread of only \$16/MWh would have made the project look still worse. The same is true for interest rates. RME chose to use the lowest prime rate on record at the time of writing. Prime plus one or two is perhaps more accurate, especially given the speculative nature of this project, but that too would have made the project look even worse.<sup>12</sup>

Given that in this analysis RME made assumptions generally favorable to Goldendale and the financial results are still abysmal, RME is left to speculate on what it is that the project's sponsors see that RME does not.

Looking at the reports produced to date, and the resources at Goldendale's disposal, RME must assume the sponsors are intelligent, successful people. They must see all the same market forces and interest charges that RME sees. At the same time, the project as currently proposed appears from all angles to be destined to fail, in short order. RME is hesitant to make the following statement but feels it may be true and must be addressed: It is possible that the Goldendale Pump Storage Project is being proposed with full knowledge that it will fail. Further, bankruptcy may be an unstated but integral part of the Goldendale business plan as a means of shedding sufficient debt to survive in the current wholesale power market.

If we look at bankruptcy as an unstated but intended method of shedding the bulk of the construction cost, the project begins to make financial sense. If, in the course of a bankruptcy proceeding, the tunnels and reservoirs are declared sunk costs, and total debt is reduced to a hypothetical \$75 million by salvaging the turbines and generators (\$25 million apiece for three used turbines and control structures) annual debt service drops to a very reasonable \$4.9 million.

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<sup>12</sup> At the time of this writing, November 28, 2019, the prime rate is 4.75% and RME in this analysis is using a rate of Prime plus 0.25%.

Adding M&O only brings the total up to about \$13.4 million. Using the same cash flow stream as in the previous examples, but with the restructured debt, Goldendale might see an annual profit of about \$6.18/MWh, \$21.7 million per year. Its cost of production would be about \$44/MWh, comfortably lower than the average peak wholesale prices of \$50/MWh.<sup>13</sup>

### **Goldendale - Without Amortization**

#### **Capital Cost**

NOI Cost Estimate	\$2,200,000,000
WSST @ 6.5%	\$143,000,000
Total Estimated Direct Cost	\$2,343,000,000
Pre Const Interest (60 Months)	\$246,310,804
Installed Cost	\$2,589,310,804

#### **Maintenance and Plant Cost**

Cost	\$2,589,310,804
Interest Rate	5.0%
Term (Yrs.)	1000
Annual Interest Pmt.	\$129,465,540
Wages	\$3,860,000
Other	\$4,620,000
M&O	\$8,480,000
Total	\$137,945,540

### **Goldendale - With Bankruptcy**

#### **Capital Cost**

NOI Cost Estimate	\$75,000,000
WSST @ 6.5%	\$4,875,000
Total Estimated Direct Cost	\$79,875,000
Pre Const Interest (60 Months)	\$8,396,959
Installed Cost	\$88,271,959

#### **Maintenance and Plant Cost**

Cost	\$88,271,959
Interest Rate	5.0%
Term (Yrs.)	1000
Annual Interest Pmt.	\$4,413,598
Wages	\$3,860,000
Other	\$4,620,000
M&O	\$8,480,000
Total	\$12,893,598

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<sup>13</sup> One simple way to eliminate the possibility of bankruptcy as an unstated but integral part of Goldendale's business plan is to include a clause in any regulatory approval of the project requiring Goldendale to set aside funding to remove the turbines and destroy the tunnel in the event the project fails.

<b>Cash Flow From Operations</b>		<b>Cash Flow From Operations</b>	
<b>Generation</b>		<b>Generation</b>	
Capacity	1,200	Capacity	1,200
Hrs. / Day	8	Hrs. / Day	8
Days /Yr.	365	Days /Yr.	365
Annual Prod (MWh)	3,504,000	Annual Prod (MWh)	3,504,000
Generation \$/MWh	\$50	Generation \$/MWh	\$50
Revenue from Generation	175,200,000	Revenue from Generation	175,200,000
<b>Pumping</b>		<b>Pumping</b>	
Pumping Rate	1,200	Pumping Rate	1,200
Hrs. / Day	10	Hrs. / Day	10
Days /Yr.	365	Days /Yr.	365
Annual Pumping (MWh)	4,380,000	Annual Pumping (MWh)	4,380,000
Pumping \$/MWh	\$32	Pumping \$/Who	\$32
Annual Pumping Cost	140,160,000	Annual Pumping Cost	140,160,000
<b>Net Cash Flow from Operation</b>	\$35,040,000	<b>Net Cash Flow from Operation</b>	\$35,040,000
<b>Profit (Loss)</b>	<b>(\$102,905,540)</b>	<b>Profit (Loss)</b>	<b>\$22,146,402</b>
Cost of Production (\$/MWh)	\$79.37	Cost of Production (\$/MWh)	\$43.68
Profit (Loss) \$/MWh	(\$29.37)	Profit (Loss) \$/MWh	\$6.32

## **Appendix 5**



NOV. 6, 2020

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SCIENCE AND ENVIRONMENT

# Northwest clean-energy advocates eye pumped hydro to fill gaps, with tribes noting concerns

By [Courtney Flatt](#) (OPB)

July 27, 2020 12:43 p.m.

**Many states – including Oregon and Washington – have set renewable energy goals. But, there's a problem. The wind isn't always blowing and the sun isn't always shining. Advocates say pumped hydro could solve those problems.**

Looking over the edge of a Columbia River Gorge slope, you can see the river more than 2,000 feet below. A former aluminum smelter sits to the left at the bottom of the cliff. Wind turbines spin nearby, lining the cliff's edge.

This site near Goldendale, Washington, in Klickitat County, could one day help solve a downside of current renewable energy technology: reliability. But it's not without controversy.

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The [Goldendale Energy Storage Project](#) would be the largest of its kind in the Northwest. It's an old technology that's recently received a lot of study and interest from companies looking to build energy storage projects in Washington, Oregon and Idaho.

**Related:** [How lakes can work like batteries to charge the electrical grid](#)

"If we want to have a green and clean power system, we definitely need a lot of storage," said Vladimir Koritarov, a program manager at Argonne National Laboratory in Illinois.

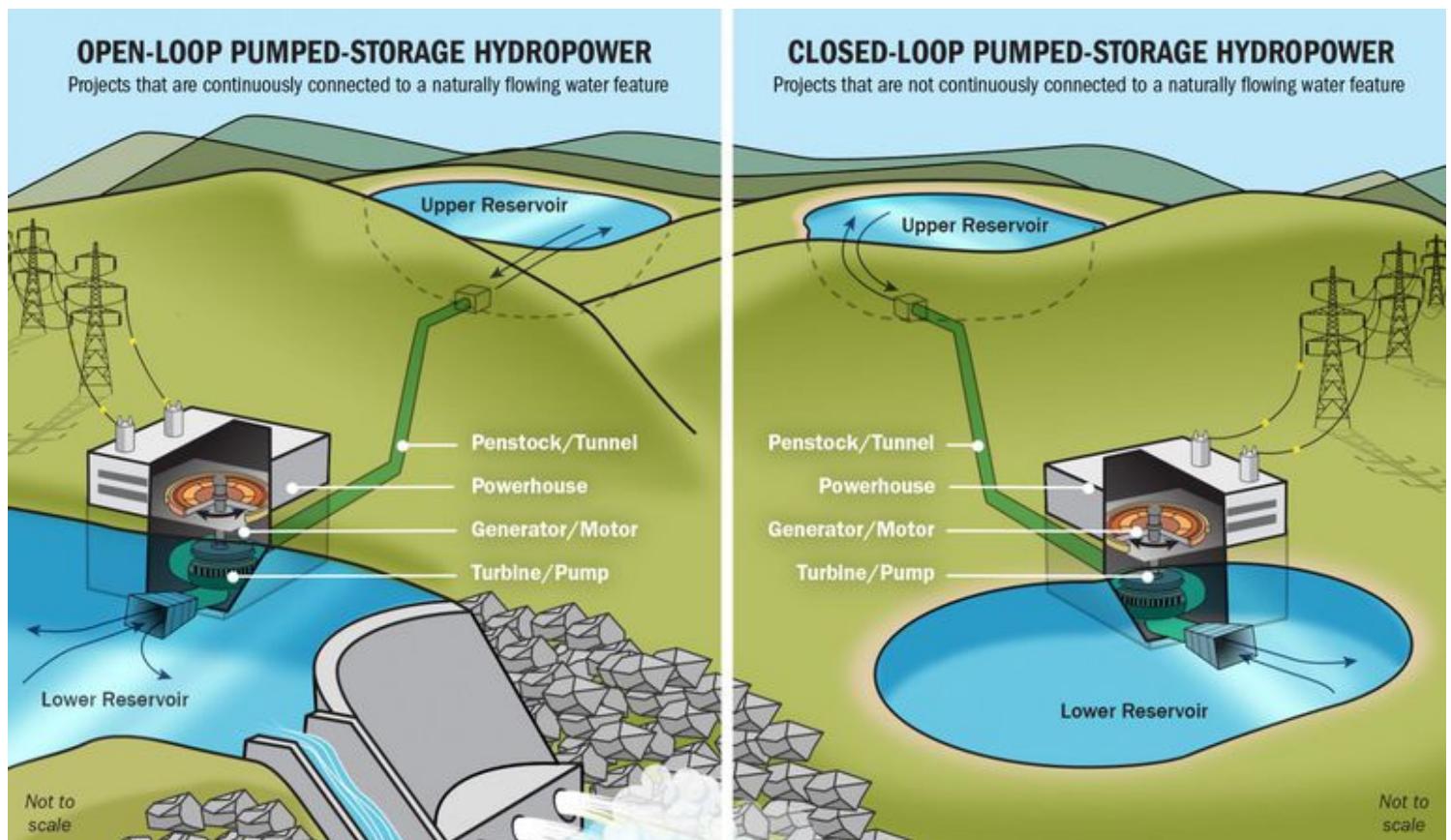
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always shining. That's why wind and solar power are variable, or intermittent.

Storage facilities, like pumped hydropower or batteries, can keep some of that energy "on tap," Koritarov said, and then release it when it's needed.

"Storage will be key for a high level of variable renewables in the system and effectively operating the system," he said.

Pumped hydropower is an old technology. To make it work, there are two reservoirs, typically one high up on a hilltop, the other down below. When there's a lot of electricity available, water is pumped from the lower reservoir into the higher one.



Pumped hydro projects can generally be described as "open loop" or "closed loop" systems.

Courtesy of Rye Development

Then, when more electricity is needed, the water in the upper reservoir is released through turbines and back into the lower reservoir.

"Why is pumped storage hydro really good for large-scale applications?" Koritarov asked. "Because of the size."



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grid, said Vish Viswanathan, an energy storage researcher at [Pacific Northwest National Laboratory](#) in Richland, Washington.

"I like to use the analogy of marathon versus a sprinter versus a middle-distance runner," Viswanathan said.

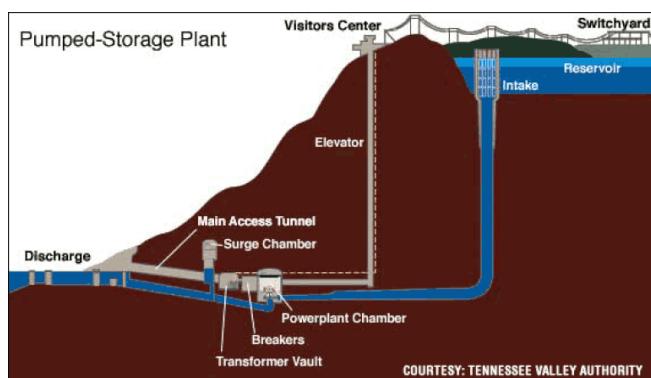
Smaller lithium-ion batteries generate energy for shorter amounts of time, like a sprinter. Another type of battery called a flow battery is more of a middle-distance runner. And, pumped storage, with its large reservoirs, would be a marathoner.

Pumped storage operates at more of a utility-scale. There are already at least 40 pumped hydro plants in the U.S., many in the East. Very few new plants have been built in 30 years.

Most of the new pumped hydro projects have been proposed in the West, according to the U.S. Department of Energy. At least four new plants are proposed in Washington, two in Oregon, one in Idaho and two in Montana.

## 'Fits the correct profile'

Washington [already has one pumped hydro plant](#) near Grand Coulee, which started generating energy at a portion of the pumping station in 1973. Before that, it delivered irrigation water to the Columbia Basin Project.



This diagram illustrates how pumped hydro storage works with an upper and lower reservoir.

Tennessee Valley Authority

Investors often have to study several locations before they decide where to site a pumped hydro facility, said Kendall Mongird, an economist with Pacific Northwest National Laboratory.

She said many facilities might be proposed in the region because "it fits the correct profile where it's actually going to provide a valuable need while also providing a return." But there are drawbacks. The application process can be lengthy and expensive.



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systems.

Researchers say these types of designs should have fewer environmental concerns than pumped storage projects that continuously draw water directly from a natural waterbody. Most newly proposed pumped storage projects are closed-loop designs.

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Recently, Washington Reps. Cathy McMorris Rodgers and Dan Newhouse have [introduced legislation](#) that would further speed up the permitting process for those types of closed-looped pumped hydro systems. Permitting and construction can take up to 10-years for these types of projects, making them costly and time-consuming for investors.

Kurt Miller, with Northwest RiverPartners, said it's important to fast-track some of these "low-impact technologies that will help be an important contributing factor to our clean energy goals."

Researchers at PNNL say getting investors to buy in quickly is important, but environmental regulatory steps shouldn't be skipped.

## Not without complications

The pumped hydro project near Goldendale is one of the first in the country to apply for an expedited licensing process with the [Federal Energy Regulatory Commission](#).

That concerns some groups who have opposed the project. Like many large energy projects, the Goldendale project is not without complications.

The Yakama Nation has opposed the Goldendale facility from the start. They say the site footprint would impact sacred cultural resources, "including archeological, ceremonial, burial petroglyph, monumental and ancestral use sites," according to Paul Ward, Yakama Nation Fisheries Program manager.

"As you're aware, the Columbia River was dammed over the last century. In doing so, that impacted many of our rights, interests and resources," Ward said at a Washington



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Energy development, development in the West, what comes at a cost to the Yakama Nation.”

Similar concerns have been raised for [a much smaller “hydro battery” project](#) on the Upper Columbia River. The Confederated Tribes of the Colville Reservation recently sent a letter to federal regulators stating they didn’t believe their concerns about cultural resources that would be harmed by the project were being heard.

“We reiterate to the Commission the cultural significance of the location selected for the Project and highlight areas where our concerns were ignored or minimized based on the inherent ethnocentric bias in the [Federal Energy Regulatory Commission] process,” the letter states.



The Goldendale Energy Storage Project would be built just outside Goldendale in Klickitat County, Wash. If built, it would be the largest pumped storage facility in the Northwest. The lower reservoir is proposed in the flat area below, by John Day Dam.

Courtesy of PGE Development



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The outcome would see the developers, such as Energy Northwest, to consider alternate locations for the project, which would test out a small-scale modular type of pumped storage facility.

At the site of the Goldendale project, the Yakama Nation also has concerns about the facility's location near an old aluminum smelter. Project developers say the storage reservoirs would not be built in contaminated areas.

Other groups have also raised concerns about golden eagles that nest nearby. They say the birds already run into trouble with a nearby wind farm – one of the largest wind projects in Washington. They're also concerned about the amount of water the project would initially take out of the Columbia River.

**Related:** [Federal environmental policies during the COVID pandemic raise concerns across the Northwest](#)

Project developers Rye Development and National Grid say they're working with the Washington Department of Fish and Wildlife to come up with a "protection enhancement plan." The department had [initially raised wildlife habitat concerns](#) about the project. Developers also say they're creating an adaptive water quality monitoring plan with the Washington Department of Ecology.

The federal environmental process to study those plans is expected to begin this fall.

"We are very interested in developing an environmentally benign project that's a great benefit to the community. To that extent, we proposed a project we feel has very limited impacts on the landscape," Erik Steimle, with Rye Development, said.

## Strong support

The project has received strong support from the Klickitat County Public Utility District, where it would purchase its water rights to initially fill the reservoirs and periodically make up for water that's evaporated or potentially leaked. It's also seen support from the Goldendale Chamber of Commerce and county commissioners, who've called it "a game-changer in Klickitat county and the whole region."

"This particular site has been studied for pumped storage for more than 30 years," Steimle said. "It's identified as one of the best locations in the United States from a grid connectivity standpoint. It also has good geology and geography to support a project."





Steimle said project developers expect a decision on the permit application in 2022. Rye Development and National Grid have [already received a federal license](#) for another pumped storage project near Klamath Falls, Oregon. If built, [Swan Lake North](#) would be the largest pumped storage project in the region – that is, until the Goldendale project potentially comes online. It would be around triple the size of Swan Lake North.

At a time when states are trying to reduce their dependence on fossil fuels that release heat-trapping greenhouse gases, new storage projects could be an important step forward, according to Argonne National Laboratory's Vladimir Koritarov. But, he said, pumped storage is only one of the steps.

“Pumped storage technologies are very beneficial. All storage technology is very useful – all of them have certain advantages. We need a variety of energy storage technologies. Depending on their characteristics, all of them have some good uses in the power systems,” Koritarov said.

***Correction: July 30, 2020.*** An earlier version of this story misspelled Kendall Mongird’s last name.

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## **Appendix 6**

# INDIAN REMAINS, HUMAN RIGHTS: RECONSIDERING ENTITLEMENT UNDER THE NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION ACT

by Angela R. Riley\*

## I. INTRODUCTION

Tribal representatives described a gruesome scene where pieces of caskets, the outlines of additional graves, and parts of human burials were exposed and lying on the surface of the drawdown zone.<sup>1</sup>

When the federal government undertook to build Fort Randall Dam in 1949, it was known that the Indian cemetery downstream would become the site of Lake Francis Case. According to the government's relocation plan, the bodies in the cemetery would be exhumed and reburied in a new location. But, decades later, as the U.S. Army Corps of Engineers (the Corps) raised and lowered the lake's water levels, the remains of dead Indians began to emerge in the tide. By the time the Yankton Sioux Tribe was notified, caskets, bones, pots, and burial shrouds had floated to the surface of Lake Francis Case.<sup>2</sup>

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\* J.D., Harvard Law School (1998); B.A., *summa cum laude*, University of Oklahoma (1995). Angela Riley is a Teaching Scholar at Santa Clara University School of Law. The author would like to thank Kristen Carpenter and Kal Raustiala for their invaluable comments on drafts of this Article. Special thanks go to Josh Swartz for his insightful intellectual contribution and for his unfailing support.

1. See South Dakota: Drawdown of Francis Case Reservoir, at <http://www.achp.gov/casearchive/cases6-00Sd1.html> (last visited Nov. 14, 2002).

2. See *infra* Part III.B.4.

Burial practices exist in almost every human society. They embody cultural traditions and spiritual beliefs, linking the living to the dead, and the present to the past. As evidence of their significance, grave preservation laws have been developed in almost every state in the United States. However, most have proven incapable of protecting Indian burial grounds and accommodating the unique mortuary practices and distinct historical context of American Indians.<sup>3</sup>

In order to remedy this social injustice, Congress enacted the Native American Graves Protection and Repatriation Act (NAGPRA, or the Act) in 1990.<sup>4</sup> Intended to protect Indian cultural property, NAGPRA established guidelines for repatriation, criminalized trafficking of Indian cultural property, and set forth consultation procedures to govern future excavations of Indian human remains and funerary objects. Since its enactment, however, NAGPRA has been applied almost exclusively in the context of repatriation. In contrast, significantly less attention has been devoted to NAGPRA's provisions designed to prevent future excavations of Indian burial grounds.<sup>5</sup> The few published judicial opinions that do address this aspect of NAGPRA, however, demonstrate that, while NAGPRA undoubtedly marked a major victory for indigenous peoples in regards to repatriation, traditional property models continue to thwart the human rights objectives that NAGPRA was enacted to preserve.

This article posits that human rights and property rights are inextricably linked. The ability to hold property and wield power is essential to the exercise of other basic human rights.<sup>6</sup> Thus, the

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3. This Article uses the terms "Indian" and "American Indian" interchangeably to refer to the indigenous peoples of the United States.

4. Native American Graves Protection and Repatriation Act, 25 U.S.C. §§ 3001–3013 (2000).

5. See Hartman Lomawaima, *NAGPRA at 10: Examining a Decade of the Native American Graves Protection and Repatriation Act*, in *Implementing the Native American Graves Protection and Repatriation Act* 1, 2 (Roxana Adams ed., 2001) ("The legislation seems to have less to do with graves protection, though that's in its title, than it does with repatriation. Graves protection is something that has been on the minds of Native people for a very long time. I would like to see that emphasized as equally as repatriation.").

6. Leslie Kurshan, *Rethinking Property Rights As Human Rights: Acquiring Equal Property Rights For Women Using International Human Rights Treaties*, 8 Am. U. J. Gender Soc. Pol'y & L. 353, 357 (2000); see Yoram Barzel,

recognition of property rights is critical, as it allows groups to function as "economic actors" in society.<sup>7</sup> Because classical property models operate to deprive indigenous peoples of the right to control their own property—tangible and intangible—they are often powerless to exercise their human rights. This article contends that the human rights goals of NAGPRA will only be realized through a fundamental shift in thinking from an individual rights-oriented property model to one capable of accommodating both the rights and responsibilities inherent in property ownership.<sup>8</sup>

Part II briefly sets forth the history and goals of NAGPRA, providing a background to the Act and detailing the human rights initiatives at its core. Part II also discusses the significance of cultural property to indigenous communities and its role in the cultural survival of indigenous groups. Part III describes NAGPRA's excavation provisions and explains the process through which either lineal descendants or culturally affiliated Indian tribes are to proceed under the Act to achieve, first, a right of consultation, and, second, an opportunity to take possession of the subject human remains and/or funerary objects. Part III further demonstrates how the interpretation and application of NAGPRA by the courts—operating pursuant to limited conceptions of traditional property models—has resulted in the deprivation of indigenous peoples' property rights and human rights. Part IV explores the role of international human rights instruments and norms in securing the rights of indigenous peoples, and focuses, specifically, on the groundbreaking case of *The Mayagna (Sumo) Indigenous Community of Awas Tingni v. Nicaragua (Awas Tingni)* decided by the Inter-American Court on Human Rights.<sup>9</sup> Part IV uses *Awas Tingni* as an example of the

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Economic Analysis of Property Rights 4 n.3 (James E. Alt & Douglass C. North eds., 2d ed. 1997) ("The distinction sometimes made between property rights and human rights is spurious. Human rights are simply part of a person's property rights.").

7. Kurshan, *supra* note 6, at 357.

8. See Deborah L. Nichols et al., *Ancestral Sites, Shrines, and Graves; Native American Perspectives on the Ethics of Collecting Cultural Properties*, in *The Ethics of Collecting Cultural Property* 27, 37 (Phyllis Mauch Messenger ed., 1989) ("But most important is the need for a change in attitudes. Archaeologists and museums have a special responsibility to broaden public awareness and knowledge of Native Americans, which includes a responsibility to respect Native American values.").

9. *The Mayagna (Sumo) Indigenous Community of Awas Tingni v.*

increasingly prevalent shift in international law towards more fluid conceptions of property and ownership that are better suited to ensure the continued survival of indigenous peoples. Finally, Part V suggests new property models capable of accommodating individual property rights in the classical sense, while making room for the protection of indigenous peoples' human rights. Part V discusses the possible consequences of new property models as applied to the NAGPRA cases discussed herein, as well as their effect on other struggles of indigenous peoples in Western legal systems. This article concludes that it is necessary to move beyond the classical property model—one which considers the rights but not the obligations of individual property owners—to new models of property capable of reconceptualizing ownership and entitlement for the protection of indigenous peoples' human rights and continued existence.

## II. NAGPRA: ITS HISTORY AND AIMS

The history of the deplorable treatment of Indian remains and cultural property in the United States is a sad and sickening tale.<sup>10</sup> Some of the earliest writings by colonists reveal European fascination with Native American remains and funerary objects. An early example is recorded in the journal of a Mayflower Pilgrim who wrote about uncovering an Indian grave: "We brought sundry of the prettiest things away with us, and covered the corpse up again."<sup>11</sup> To accommodate this morbid curiosity with Indian dead during the early periods of forced assimilation and extermination, museums were created to serve as repositories for Indian artifacts, thus contributing to the fetishism of Indians by Europeans and capturing colonists' love

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Nicaragua, 79 Inter-Am. Ct. H.R. (ser. C) (Aug. 31, 2001), available at [http://www.corteidh.or.cr/seriecing/serie\\_c\\_79\\_ing.doc](http://www.corteidh.or.cr/seriecing/serie_c_79_ing.doc).

10. Because the history of the treatment of Indian graves in America is well documented and easily accessible, I will not recount it here in detail. For a more thorough account of this history, see, for example, Jack F. Trope & Walter R. Echo-Hawk, *The Native American Graves Protection and Repatriation Act: Background and Legislative History*, in *Repatriation Reader: Who Owns American Indian Remains?* 123, 126 (Devon A. Mihesuah ed., 2000). See also Mary Lynn Murphy, *Assessing NAGPRA: An Analysis of Its Success from a Historical Perspective*, 25 Seton Hall Legis. J. 499, 502 (2001) (discussing colonial views of Indians as inferior, and the disregard of Indian religion, culture, and property norms during the development of America's legal system).

11. Mourt's Relation: A Journal of the Pilgrims at Plymouth 28 (Dwight B. Heath ed., 1963).

affair with the romantic West.<sup>12</sup> With Western expansion, Indians were viewed as a vanishing people, and Indian "trinkets" and bodies were coveted out of blatant curiosity.<sup>13</sup> In congressional debates over NAGPRA, Congress found that during much of the history of the United States digging and removing the contents of Native American graves for reasons of profit or curiosity had been common practice.<sup>14</sup>

The mistreatment of Indian dead extended beyond individual curiosity, becoming formal federal policy in 1868, when the Surgeon General ordered all U.S. Army field officers to send Indian skulls and other body parts to the Army Medical Museum for studies comparing the sizes of Indian and White crania.<sup>15</sup> Pursuant to this order, the heads of thousands of Indians, many of whom died during infamous massacres by the federal government, were cut off their bodies and sent to museums for display or study.<sup>16</sup> Then, in 1906 Congress passed the Antiquities Act, intended to protect "archaeological resources" located on federal lands.<sup>17</sup> The Antiquities Act, however, considered Indian remains on federal lands "archeological resources," thus converting them into federal property and allowing them to be kept and displayed in public museums.<sup>18</sup> These and other federal policies led to the mass excavation of Indian bodies and the looting of Indian graves. By 1986, the Smithsonian Institution alone held the remains of over 18,000 American Indians in its collections.<sup>19</sup>

The unlawful excavation of Indian bodies and the looting of graves was, in part, a result of racism, with a belief in Indians' racial inferiority certainly contributing to the epidemic.<sup>20</sup> But perhaps even

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12. See Murphy, *supra* note 10, at 500–01.

13. *Id.*

14. Trope & Echo-Hawk, *supra* note 10, at 126.

15. *Id.*

16. *Id.* ("Government headhunters decapitated Natives who had never been buried, such as slain Pawnee warriors from a western Kansas battleground, Cheyenne and Arapaho victims of Colorado's Sand Creek Massacre, and defeated Modoc leaders who were hanged and then shipped to the Army Medical Museum").

17. Antiquities Act of 1906, Pub. L. No. 209, 34 Stat. 225 (codified as amended at 16 U.S.C. §§ 431–433 (2000)).

18. Trope & Echo-Hawk, *supra* note 10, at 127.

19. *Id.* at 136.

20. See, e.g., Robert E. Bieder, *A Brief Historical Survey of the Expropriation of American Indians* (1990) (recounting the goal of Dr. Samuel

more invidious was the complete devaluation of indigenous perspectives and cultures in American jurisprudence that set the stage for mass theft of Indian cultural property. Eurocentric property conceptions, which contemplated property rights as individual rights, regarded ownership as an individual safeguarding his or her own goods.<sup>21</sup> As such, the vast majority of White graves were marked and walled off from society, whereas Native peoples maintained traditional practices of storing items in open areas or caves. The Eurocentric point of view thus diminished Indian burial traditions and did not respect unique Native mortuary practices, such as scaffold, canoe, or tree burials.<sup>22</sup> Nor did it protect unmarked graves, treating them as abandoned, even though many of the graves were left behind by tribes that were forcibly removed from their ancestral homelands by the government.<sup>23</sup> Native burial practices, which were so unlike European burials, deterred government officials from prosecuting cases of theft of Native cultural property, since such property was kept in the open and was free for the taking by whomever "discovered" it.<sup>24</sup> As such, the private property values of Western law contributed not only to the displacement of Indian peoples but also to the "abandonment" by Indians of their own burial grounds.<sup>25</sup> It was not until the 1980s that state burial laws were extended to protect unmarked graves or those outside of specifically designated cemeteries.<sup>26</sup>

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Morton, a physical anthropologist, who sought to prove that the American Indian was a racially inferior "savage" doomed to extinction).

21. Sherry Hutt & C. Timothy McKeown, *Control of Cultural Property as Human Rights Law*, 31 Ariz. St. L.J. 363, 365 (1999).
22. Trope & Echo-Hawk, *supra* note 10, at 130.
23. *Id.*
24. Hutt & McKeown, *supra* note 21, at 369.
25. See Murphy, *supra* note 10, at 506–07.
26. Current cases nevertheless indicate that many jurists still do not understand the differences between Western and Indian property values. See, e.g., Castro Romero v. Becken, 256 F.3d 349 (5th Cir. 2001). In *Castro Romero v. Becken*, the Fifth Circuit rejected the claim of the lineal descendant of the Lipan Apache Chief dealing with the protection of cemeteries, holding that Castro's allegation that "the oral history of the Lipan Apache establishes the Universal City land as a burial ground is not sufficient to convert the land into a 'cemetery' for purposes of the statute" because the plaintiff had not alleged that the land "was publicly dedicated as a cemetery, that the land was enclosed for use as a cemetery, or that the land even if once used for burial purposes has not been abandoned." *Id.* at 355.

In response to the mistreatment of Indian dead and the continued devaluation of Indian cultural property, NAGPRA was finally enacted in 1990.<sup>27</sup> Perhaps most significantly, the passage of NAGPRA symbolized the tacit recognition that cultural property rights have been obstructed by the disparity between Eurocentric views of personal private property, which dominate American jurisprudence, and the less formalized system of property rights seen in Native communities.<sup>28</sup> In this regard, NAGPRA is significant as it stands as one of the first American statutes which incorporates indigenous peoples' perspectives and confirms the belief that indigenous peoples' right to control the fate and integrity of their cultural property is a valuable tool of self-determination and a necessary component of cultural survival.<sup>29</sup>

Similarly, international legal doctrines contemplate and recognize the right to maintain group culture and identity and place particular emphasis on the rights of indigenous peoples.<sup>30</sup> As such,

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27. 25 U.S.C. §§ 3001–3013 (2000).

28. Sherry Hutt, *Native American Cultural Property*, 34 Ariz. Att'y 18, 20 (1998).

29. See, e.g., Rosemary J. Coombe, *Intellectual Property, Human Rights & Sovereignty: New Dilemmas in International Law Posed by the Recognition of Indigenous Knowledge and the Conservation of Biodiversity*, 6 Ind. J. Global Legal Stud. 59, 87 (1998). Rosemary J. Coombe notes that:

[I]f human rights were to be “recognized as truly interdependent and individual, then [intellectual property rights] would also have to be compatible with the rights enshrined in the International Covenant on Civil and Political Rights. Civil and political rights may, in many circumstances, come into conflict with the exercise of [intellectual property rights].

*Id.*

30. See International Covenant on Civil and Political Rights, *opened for signature* Dec. 16, 1966, art. 27, S. Exec. Doc. E, 95-2, at 31 (1978), 999 U.N.T.S. 171, 179 (entered into force Mar. 23, 1976) [hereinafter ICCPR] (affirming the right of persons belonging to minorities to enjoy their own culture in community with the other members of their group); *id.* art. 1 (defining indigenous groups as “peoples” within the meaning of Article 1, which holds that “all people have the right to self determination”). The right to self-determination through cultural integrity for groups is also a generally accepted principal of customary international law. See S. James Anaya, *Environmentalism, Human Rights and Indigenous Peoples: A Tale of Converging and Diverging Interests*, 7 Buff. Envtl. L.J. 1, 9 (2000).

these doctrines capture and acknowledge the importance of group cultural property in giving meaning to human existence.<sup>31</sup> Cultural property situates indigenous peoples in time, linking them to their place of origin. For a tribe, controlling collective cultural property, particularly that which is sacred and intended solely for use and practice within the group, is a crucial element of self-determination. As with other forms of collective ownership seen in indigenous communities, objects of cultural property derive their status from community use and recognition rather than individual ownership.<sup>32</sup> Legal enforcement of group ownership of cultural property supports self-determination principles by placing the destiny of tribal cultural property into the hands of indigenous peoples, affirming their ability to determine themselves as a people through their culture. When a group has exclusive authority to prescribe the employment of its most valuable creations, the entire community benefits.<sup>33</sup> As Sarah Harding argues, “[c]ultural property takes on a life and meaning of its own; it acquires something like a soul and it is this soul, not a specific human end, which shapes our relationship with cultural property.”<sup>34</sup>

Because recognition of indigenous peoples’ property rights—to a traditional land base, preservation of the environment, and communal intangible knowledge—is essential for cultural survival, battles are now waged on every front to ensure the continued existence of indigenous peoples worldwide.<sup>35</sup> Conflicts over land have long been a hallmark of Indian-White relations in this country, and Indians’ struggle to maintain or recover a traditional land base or right of occupation seems never-ending.<sup>36</sup> Similarly, because of the

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31. Hutt, *supra* note 28, at 19.

32. Susan Scafidi, *Intellectual Property and Cultural Projects*, 81 B.U. L. Rev. 793, 811 (2001).

33. Angela R. Riley, *Recovering Collectivity: Group Rights to Intellectual Property in Indigenous Communities*, 18 Cardozo Arts & Ent. L.J. 175 (2000).

34. Sarah Harding, *Justifying Repatriation of Native American Cultural Property*, 72 Ind. L.J. 723, 760 (1997).

35. See, e.g., Anaya, *supra* note 30, at 8 (discussing indigenous peoples’ property interest in land as also linked to their cultural integrity, “insofar as these cultures are connected with land tenure”); Rebecca Tsosie, *Land, Culture, and Community: Reflections on Native Sovereignty and Property in America*, 34 Ind. L. Rev. 1291, 1306 (2001) (arguing that to “[n]ative peoples, land is vital to political ideology . . . self-sufficiency, and also to cultural identity”).

36. See, e.g., United States v. Dann, 470 U.S. 39 (1985) (discussing the

unique cultural relationship of indigenous peoples to the land, many scholars now claim indigenous peoples possess a human right to preservation of the environment.<sup>37</sup> For indigenous groups whose existence depends on and is identified through their relationship to the land and nature, it is impossible to differentiate between environmental injustice and human rights abuses.<sup>38</sup>

In addition, arguments are being made, both domestically and internationally, for the recognition of group rights to intellectual property in indigenous communities as a mechanism to "allocate rights over knowledge."<sup>39</sup> Recognizing some form of intellectual property rights for indigenous peoples "could be a valuable tool for

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viability of a claim of tribal title by Shoshones, where compensation for the land had been paid into a trust for, but not yet disbursed to, a Shoshone tribe); United States v. Sioux Nation of Indians, 448 U.S. 371 (1980) (holding that the 1877 act that relinquished the Sioux Nation's rights to the Black Hills amounted to a taking of tribal land for which just compensation was required); The Mayagna (Sumo) Indigenous Community of Awas Tingni v. Nicaragua, 79 Inter-Am. Ct. H.R. (ser. C) (Aug. 31, 2001), ¶ 4, available at [http://www.corteidh.or.cr/seriecing/serie\\_c\\_79\\_ing.doc](http://www.corteidh.or.cr/seriecing/serie_c_79_ing.doc) (ordering Nicaragua to recognize and protect tribal lands).

37. See, e.g., Anaya, *supra* note 30, at 3 (commenting that related to the discourse that joins human rights and environmentalism is a discourse "that focuses directly on the human rights of indigenous peoples. This discourse views indigenous groups and their cultures as valuable, and it constructs a series of rights and entitlements that are deemed to pertain to these communities and their members on the basis of broadly applicable human rights standards.").

38. See Arctic Refuge: A Circle of Testimony 5 (Hank Lentfer and Carolyn Servid eds., 2001) (quoting Sarah James, member of the Gwich'in Nation, discussing her opposition to plans to drill for oil in the Arctic National Wildlife Reserve: "But our fight is not just for the caribou . . . . [O]ur fight is a human rights struggle—a struggle for our rights to be Gwich'in, to be who we are, a part of this land."); Sevine Ercmann, *Linking Human Rights*, 7 Buff. Envtl. L.J. 15, 17 (2000).

39. David R. Downes, *How Intellectual Property Could Be A Tool to Protect Traditional Knowledge*, 25 Colum. J. Envtl. L. 253, 256 (2000); see Rosemary J. Coombe, *The Recognition of Indigenous Peoples' and Community Traditional Knowledge in International Law*, 14 St. Thomas L. Rev. 275, 284 (2001) ("Intellectual property rights are not merely technical matters. They increasingly involve crucial questions not only of economic interest, competitiveness, and market power, but also of environmental sustainability, human development, ethics and international human rights."); James D. Nason, *Traditional Property and Modern Laws: The Need for Native American Community Intellectual Property Rights Legislation*, 12 Stan. L. & Pol'y Rev. 255, 260–63 (2001) (asserting the need for "new legal approaches to intellectual property that would protect intangible Native American cultural property").

communities to use to control their traditional knowledge and to gain a greater share of the benefits.”<sup>40</sup> In this respect, intellectual property rights are significant insofar as the protection of traditional knowledge is integral to cultural heritage and ensures “the right to maintain and take part in cultural life.”<sup>41</sup>

But no cultural practice is more fundamental to group identity and survival than treatment of the dead. Burial practices are, in almost all cultures, indicative of religious beliefs, value for human life, reverence for the land, and relationships with nature.<sup>42</sup> This is particularly true for indigenous peoples, who are forever linked to their dead, as they define themselves through their history and place as connected to ancestors, the environment, and the earth.<sup>43</sup> For indigenous peoples, “[h]uman remains generally hold great religious significance, both for present day descendants and for the spiritual well-being of deceased ancestors.”<sup>44</sup> For example, many

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40. Downes, *supra* note 39, at 256. David R. Downes states that:

An international human rights perspective on the protection of indigenous knowledge through [intellectual property rights] would presuppose that State governments not only have obligations to indigenous peoples subject to their own jurisdictions, but also that these obligations involve respect for and protection of the indigenous knowledge of indigenous peoples . . . globally.

*Id.* See also Coombe, *supra* note 29, at 90; Riley, *supra* note 33, at 215 (noting that the “communal approach to entitlements in cultural property will not only preserve group property generally, but it will secure the work in the cultural context from which it arose, ensuring that the creation endures through time to be enjoyed by individuals whose identity is inextricably bound to the cultural work”).

41. Downes, *supra* note 39, at 255.

42. See, e.g., Trope & Echo-Hawk, *supra* note 10, at 124 (arguing that “respect for the dead is a mark of humanity and is as old as religion itself”).

43. When Geronimo, the famous Apache leader and warrior was held prisoner at Fort Sill, he was approached by a school teacher to give his life story and he began by recounting the Apache tribal creation story. Robert J. Conley, *The Witch of Goingsnake and Other Stories*, at xii (1988).

44. Dean B. Suagee, *Tribal Voices In Historical Preservation: Sacred Landscapes, Cross-Cultural Bridges, and Common Ground*, 21 Vt. L. Rev. 145, 203 (1996); see Harding, *supra* note 34, at 765 (“[G]rant[ing] Native Americans the same legal rights as other Americans have concerning their ancestral remains is pivotal to cultural integrity and pride and thus the preservation of

Indian people are buried with pottery or other goods because it is believed they will need these items in the afterlife. As Tessie Naranjo, a Santa Clara Pueblo tribal member, stated:

Traditional Native Americans see an essential relationship between humans and the objects they create. A pot is not just a pot. In our community, the pots we create are seen as vital, breathing entities that must be respected as all other living beings. Respect of all life elements—rocks, trees, clay—is necessary because we understand our inseparable relationship with every part of our world.<sup>45</sup>

A tribe may pursue repatriation of a pot or beaded belt buried with the dead not because of the tribe's appreciation for its physical dimensions per se, but for what it symbolizes metaphysically. While indigenous peoples revere land and earth and all that it embodies, human remains are valued not only because they represent physical property that belongs to the tribe but because human remains connect living Indians to their past and to their future.

For Indian peoples, burial ceremonies and burial sites are sacred. Although the philosophical and religious ideas of Native peoples are diverse, the vast majority of Indians hold one core belief: that the dead remain connected to the living and to the physical remains they left behind.<sup>46</sup> For example, when the Tennessee Valley Authority threatened to flood the Little Tennessee Valley in the late 1970s, Eastern Cherokees mounted fierce resistance to the project based on the threat that it posed to their cultural heritage and religious beliefs.<sup>47</sup> The Cherokees believed that the knowledge of the deceased was placed in the ground with them at the time of burial.<sup>48</sup> Exhumation of an Indian grave would destroy the knowledge and beliefs of the deceased and everything they have taught, including, in

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cultural identity, regardless of particular Native American beliefs about the spiritual afterlife of their ancestors.”).

45. Tessie Naranjo, *Thoughts On Two World Views*, in Implementing the Native American Graves Protection and Repatriation Act 22 (Roxana Adams ed., 2001).

46. See Trope & Echo-Hawk, *supra* note 10, at 151.

47. See *Sequoyah v. Tenn. Valley Auth.*, 620 F.2d 1159, 1160 (6th Cir. 1980).

48. *Sequoyah*, 620 F.2d at 1162, cited in Laurie Anne Whitt et al., *Belonging to Land: Indigenous Knowledge Systems and the Natural World*, 26 Okla. City U. L. Rev. 701, 701–02 (2001).

the case of the Eastern Cherokee, their spiritual leader's knowledge of medicine.<sup>49</sup> Thus, for many Indians, the looting of a grave goes beyond legal transgression and is treated as "an act of desecration that violates deeply held religious beliefs that are essential to the spiritual well-being of Native Americans."<sup>50</sup>

NAGPRA's role in the preservation of cultural property, and thus, cultural survival, has designated it, first and foremost, a human rights law.<sup>51</sup> A triumph for Indian peoples, NAGPRA represents the culmination of "decades of struggle by Native American tribal governments and people to protect against grave desecration, to repatriate thousands of dead relatives or ancestors, and to retrieve stolen or improperly acquired religious and cultural property."<sup>52</sup> As such, NAGPRA is "one of the most significant pieces of human rights legislation since the Bill of Rights."<sup>53</sup> NAGPRA is recognized as having created the opportunity to allay the breach between living and dead by restoring bones and possessions to the earth from which they were torn in the name of science, profit, or idle curiosity.<sup>54</sup>

NAGPRA has undoubtedly produced major successes in the repatriation context. According to C. Timothy McKeown, NAGPRA Program Leader for the National Park Service Archeological Assistance Program, by 1998 over 1000 NAGPRA summaries were received from federal agencies and institutions receiving federal funding. Approximately 700 of these institutions had completed inventories, some 400 of which included human remains. It is estimated that up to 200,000 individual remains will eventually be accounted for through the NAGPRA process.<sup>55</sup>

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49. *Id.*

50. Nichols et al., *supra* note 8, at 37.

51. See, e.g., Trope & Echo-Hawk, *supra* note 10, at 123 ("On November 23, 1990, President Bush signed into law important human rights legislation.").

52. *Id.*

53. David Hurst Thomas, *Skull Wars: Kennewick Man, Archaeology, and the Battle For Native American Identity* 214 (2000).

54. John W. Ragsdale, Jr., *Some Philosophical, Political and Legal Implications of American Archeological and Anthropological Theory*, 70 U. Mo. Kan. City L. Rev. 1, 46 (2001).

55. Nichols et al., *supra* note 8, at 256.

However, NAGPRA's role in preventing future excavations of human remains and/or funerary objects remains uncertain.<sup>56</sup> In practice, when courts apply NAGPRA in the excavation context, they consistently do so within the traditional paradigm of Anglo-American law. This approach fails to consider indigenous perspectives, resulting in the diminishment of indigenous peoples' human rights and the rejection of non-Western, community-based property conceptions. As a result, NAGPRA's human rights objectives remain unsatisfied, and the cultural survival of indigenous peoples is threatened.

### III. RAISING THE DEAD

#### A. NAGPRA's Excavation Procedures

NAGPRA establishes three mechanisms to ensure the protection of Indian cultural property.<sup>57</sup> First, it creates procedures through which culturally affiliated Indian tribes can recover human remains and funerary objects from federally funded museums.<sup>58</sup> Secondly, NAGPRA criminalizes the trafficking of Indian human

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56. See, *infra* Part III.B; Thomas, *supra* note 53, at 214. David Hurst Thomas quotes the late Northern Cheyenne Elder William Tallbull:

How would you feel if your grandmother's grave were opened and the contents were shipped back east to be boxed and warehoused with 31,000 others and itinerant pothunters were allowed to ransack her house in search of 'artifacts' with the blessing of the U.S. government? It is sick behavior. It is un-Christian. It is [now] punishable by law.

*Id.* Brian Patterson writes:

In many ways, [NAGPRA] is a wonderful law because it has helped many Indian nations protect their sacred sites and restore the artifacts of their heritage. However, this law worries me because of what it says about our society. I have three children, and I do not have to tell them that it is wrong to go into a cemetery and dig people up. They know it is wrong. No one would consider building a parking garage on top of Arlington National Cemetery. Congress does not have to pass a law saying that would be wrong. Everybody knows it is wrong.

Brian Patterson, *Preserving the Oneida Nation Culture*, 13 St. Thomas L. Rev. 121, 123 (2000).

57. 25 U.S.C. §§ 3000–3013 (2000).

58. *Id.* § 3005.

remains and cultural items.<sup>59</sup> Finally, it sets forth notification and consultation procedures for intentional or inadvertent excavation of Native American human remains and cultural objects on tribal and federal lands.<sup>60</sup> It is this final portion of the Act that is the subject of this article.

NAGPRA creates mandatory excavation procedures that govern ownership and control of cultural items discovered in the future on tribal or federal lands. The procedures vary, depending on whether the artifacts are to be intentionally excavated or have been inadvertently discovered.<sup>61</sup> Because NAGPRA applies only on tribal and federal lands, it functions solely within these geographical limitations. Under the Act, “tribal lands” are defined as: (A) all lands within the exterior boundaries of any Indian Reservation; (B) all dependent Indian communities; (C) any lands administered for the benefit of Native Hawaiians pursuant to the Hawaiian Homes Commission Act, 1920, and section 4 of Public Law 86-3.<sup>62</sup> Allotted Indian trust lands outside reservation boundaries do not fit the statutory definition of “tribal lands” unless they also are within a dependent Indian community.<sup>63</sup> However, because such lands are held in trust by the United States and are subject to federal control, they are treated as “federal lands” for purposes of NAGPRA.<sup>64</sup>

The statute defines “federal lands” as “any land other than tribal lands which are *controlled or owned* by the United States.”<sup>65</sup> The implementing regulations state, further, that “United States’

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59. *Id.* § 3007.

60. *Id.* § 3011.

61. *Id.* § 3002.

62. *Id.* § 3001(15).

63. This limited definition raises problems not addressed by this Article, but that are a major subject of concern for Native Alaskans in light of the Supreme Court’s decision in *State of Alaska v. Native Village of Venetie*, 522 U.S. 520 (1998), wherein the Court found that Congress intended the Alaska Native Claims Settlement Act to divest Alaskan Native tribes of their jurisdiction over remaining territories, determining that the land was not “Indian Country.” This makes application of NAGPRA’s excavation procedures in the State of Alaska, insofar as applied to “tribal lands,” highly uncertain. For a thorough discussion of the Court’s decision, see Kristen A. Carpenter, *Interpreting Indian Country In State of Alaska v. Native Village of Venetie*, 35 Tulsa L.J. 73 (1999).

64. See 25 U.S.C. § 3001(15) (2000); 43 C.F.R. § 10.2(f)(1) (2002); Suagee, *supra* note 44, at 205.

65. 25 U.S.C. § 3001 (2000) (emphasis added).

'control,' as used in this definition, refers to those lands *not owned by the United States* but in which the United States has a legal interest sufficient to permit it to apply these regulations without abrogating the otherwise existing legal rights of a person."<sup>66</sup> Additionally, with respect to the amount of federal "control" necessary to bring lands within the purview of NAGPRA, the Department of the Interior has taken the following position: "Such determinations must necessarily be made on a case-by-case basis. Generally, however, a federal agency will only have sufficient legal interest to 'control' lands it does not own when it has some other form of property interest in the land such as a lease or an easement."<sup>67</sup>

Future excavations of cultural items only fall within the purview of NAGPRA if they are embedded in either tribal or federal lands. Accordingly, lands owned by individual states, municipal governments, corporations, or other private owners do not fall within the NAGPRA rubric. Though the Southwestern United States contains Indian reservations that are expansive in size, most reservations in the United States are small, and are surrounded by non-Indian towns, farms, and commercial forests. Additionally, many tribes in the U.S. were forcibly removed from their ancestral homelands—and, thus, ancestral burial grounds—by the government, leaving many Indian graves on land that was intentionally opened up for White settlement.<sup>68</sup> Discoveries on these lands are outside of NAGPRA's protections as well.<sup>69</sup>

### 1. Intentional Excavation

In the case of a planned, intentional excavation on tribal lands, NAGPRA requires both notification and consent of the appropriate Indian tribe prior to excavation.<sup>70</sup> If the intentional

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66. 43 C.F.R. § 10.2(f) (2002) (emphasis added).

67. *Id.*; see Suagee, *supra* note 44, at 205.

68. Trope & Echo-Hawk, *supra* note 10, at 130.

69. See Russell L. Barsh, *Grounded Visions: Native American Conceptions of Landscapes and Ceremony*, 13 St. Thomas L. Rev. 127, 140 (2000). Indian burial grounds continue to be discovered on state and municipally owned lands. See, e.g., Don Behm, *Bridge Foes Cite Indian Remains*, JSOnline, Apr. 8, 2002, at <http://www.jsonline.com/news/OzWash/apr02/33691.asp> (noting that a plan to widen a state-owned road met opposition due to the discovery of Indian human remains).

70. 25 U.S.C. § 3002(c)(2) (2000).

excavation is set to take place on federal lands, NAGPRA calls for prior consultation with the appropriate Indian tribe, but consent is not required.<sup>71</sup> Procedures regarding consultation with Indian tribes are set forth in detail in the Act's implementing regulations.<sup>72</sup> Responsibility for compliance with consultation procedures on federal lands lies with the appropriate land managing agency.<sup>73</sup> The federal agency in charge of administering the excavation must also complete a written plan of action with the appropriate tribe regarding the disposition of the remains. Once the agency has complied with the consultation procedures, the process of allowing the tribe to exhume human remains and cultural items from the site begins.<sup>74</sup>

Intentional excavations of cultural items are also subject to the permit requirements of the Archeological Resources Protection Act of 1979 (ARPA).<sup>75</sup> ARPA provides, in pertinent part:

If a permit issued under this section may result in harm to, or destruction of, any religious or cultural site, as determined by the federal land manager, before issuing such permit the federal land manager shall notify any Indian tribe which may consider the site as having religious cultural importance.<sup>76</sup>

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71. *Id.* § 3002(c)(2), (c)(4).

72. 43 C.F.R. §§ 10.3(b), 10.5 (2002).

73. Charles Carroll, *Administering Federal Laws and Regulations Relating to Native Americans: Practical Processes and Paradoxes*, in Implementing the Native American Graves Protection and Repatriation Act 34 (Roxana Adams ed., 2001).

74. The implementation of the Native American Graves Protection and Repatriation Act (NAGPRA, or, the Act) to the excavation context has not always been smooth. The consultation and notification procedures have, at times, proven confusing to both tribes and the federal government. *See, e.g.*, Yankton Sioux Tribe v. U.S. Army Corps of Eng'rs, 83 F. Supp. 2d 1047, 1058 (D.S.D. 2000) (holding that, where there was a conflict within the statute, the Act's provisions protecting Native American cultural items take precedence over its provisions requiring consultation with Indian tribes).

75. 16 U.S.C. § 470aa-mm (2000); 25 U.S.C. § 3002(c)(1) (2000); *see also* Trope & Echo-Hawk, *supra* note 10, at 126.

76. 16 U.S.C. § 470cc(c) (2000); *see* Carroll, *supra* note 73 (discussing five federal laws that prompt consultations between federal agencies and Indian tribes, including: the National Environmental Policy Act of 1969; the National Historic Preservation Act of 1966; the American Indian Religious Freedom Act of 1978; Archeological Resources Protection Act of 1979; and the Native American Graves Protection and Repatriation Act of 1990).

A permit may be issued pursuant to ARPA upon a showing that the applicant is qualified, the resources will remain the property of the United States and be preserved in an appropriate institution (this provision has been modified by NAGPRA), the activity is undertaken to further archaeological knowledge, and the activity is consistent with the applicable land management plan.<sup>77</sup>

## 2. Inadvertent Discovery

In cases where cultural items or remains have been inadvertently discovered as part of another activity, such as construction, mining, logging, or agriculture, the person who has discovered the items must temporarily cease activity and notify the responsible federal agency (in the case of federal land) or the appropriate tribe (in the case of tribal land).<sup>78</sup> If notice is provided to the federal agency, that agency, in turn, has the responsibility to promptly notify the appropriate tribe.<sup>79</sup> The purpose of this provision is to "provide a process whereby Indian tribes and Native Hawaiian organizations have an opportunity to intervene in development activity on Federal or tribal lands in order to safeguard Native American human remains, funerary objects, sacred objects or objects of cultural patrimony."<sup>80</sup>

In cases of inadvertent discovery, the tribe is afforded thirty days to make a determination as to the appropriate disposition of the human remains and objects.<sup>81</sup> Activity may resume thirty days after the secretary for the appropriate federal department or the Indian tribe certifies that notice has been received, provided that resumption of the activity does not require excavation or removal of human remains or cultural items.<sup>82</sup> If human remains or cultural items must be excavated or removed, then the permit procedures for intentional excavations apply.<sup>83</sup>

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77. 16 U.S.C. § 470cc(b) (2000).

78. 25 U.S.C. § 3002(d) (2000).

79. *Id.*

80. S. Rep. No. 101-473, at 10 (1990).

81. 25 U.S.C. § 3002(d) (2000).

82. *Id.*

83. *Id.* § 3002(d)(1).

While NAGPRA indisputably affords tribes greater rights in the preservation of Indian remains and funerary objects than has ever existed under American law, vast portions of land in the United States contain Indian remains and/or cultural items, but are not covered by the Act.<sup>84</sup> When discoveries are made on such lands, tribes have no right to notification or consultation under NAGPRA.<sup>85</sup> This gap in the Act is exacerbated by the limitations imposed by courts applying NAGPRA within the unyielding parameters of the classical property model. The following cases, which address future excavations of Indian remains and/or cultural items pursuant to NAGPRA, further illustrate this point.

## B. Excavation Cases

### 1. *Castro Romero v. Becken*<sup>86</sup>

In 2000, Daniel Castro Romero, Jr. (Castro), General Council Chairman of the Lipan Apache Band of Texas, lineal descendent of the great Lipan Apache Chief, Cuelgas de Castro, sued the City of Universal City (the City) over the construction of a golf course on the ancient burial grounds of the Lipan Apache.<sup>87</sup>

Through gifts from private landowners, the City acquired enough land to build an eighteen-hole golf course.<sup>88</sup> The U.S. Army

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84. At the time of this Article, there were thirteen published cases addressing NAGPRA claims, of which at least three, or twenty-three percent, addressed the issue of “federal control” under NAGPRA, but declined to apply the Act. See *infra* Part III.B.

85. Although some other federal statutes provide for consultation with tribes in some similar circumstances, they are also inapplicable on state or privately owned lands. See, e.g., National Historic Preservation Act, 16 U.S.C. § 470 (2000) (requiring consultation with tribes as well as local governments and the public in assessing adverse effects of federal undertakings upon historic properties); National Environmental Policy Act, 42 U.S.C. § 4321 (2000) (requiring the federal agency to consider whether a proposal to conduct some action on federal lands or with federal funds will have a significant effect upon the environment).

86. *Castro Romero v. Becken*, 256 F.3d 349 (5th Cir. 2001).

87. The court of appeals indicated in dicta that Castro did not have standing to bring the NAGPRA claim because “the Lipan Apache Band of Texas is not a federally-recognized tribe.” *Id.* at 354. However, the court did not base its decision to dismiss Castro’s claims on this ground. *Id.* at 354–55.

88. *Id.* at 352.

Corps of Engineers surveyed the proposed site, as required by the Clean Water Act. In the course of the survey, human remains were found in one section of the site thought to be a prehistoric campsite.<sup>89</sup>

Shortly after the discovery of the remains, Castro sent a letter to the U.S. Army Corps of Engineers, demanding the return of the remains to the Lipan Apache Band of Texas, Inc. for reburial.<sup>90</sup> Castro received a written response from the Texas Historical Commission, informing him that the Corps agreed with its decision to turn the remains over to the City for reburial. Castro then filed suit, alleging violations of various state burial laws and federal statutes, including NAGPRA. The district court dismissed his case for failure to state a claim. Castro appealed.<sup>91</sup>

As to Castro's NAGPRA claim, the Court of Appeals for the Fifth Circuit acknowledged NAGPRA's broad enforcement procedures, stating that the Act "grants the district courts 'the authority to use such orders as may be necessary to enforce the provisions of the Act.'"<sup>92</sup> The court determined, however, that "[b]y its plain terms, the reach of the NAGPRA is limited to 'federal or tribal lands.'"<sup>93</sup> Thus, the court held that, "the district court correctly held that Castro's claims suffer from a fundamental flaw—that the human remains were found on municipal rather than federal or tribal land."<sup>94</sup> Specifically, the court asserted that, even though the U.S. Army Corps of Engineers, a federal agency, held a supervisory role with regards to construction of the golf course, this did not convert the property into "federal land" within the meaning of the statute.<sup>95</sup>

Accordingly, the court upheld the district court's dismissal of Castro's complaint, and the remains of the Lipan Apache were turned over to the City for reburial in a state cemetery.<sup>96</sup>

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89. *Id.*

90. *Id.* at 352–53.

91. *Id.* at 353.

92. *Id.* at 354 (citing 25 U.S.C. § 3013 (1994)).

93. *Id.* (citing 25 U.S.C. § 3002(a) (1994)).

94. *Id.*

95. *Id.*

96. *Id.* at 355.

## 2. *Abenaki Nation of Mississquoi v. Hughes*<sup>97</sup>

The Village of Swanton, Vermont (the Village) has operated a hydroelectric facility since 1928. In 1979, a proposal was created to upgrade the facility. In order to proceed with the project, the Village was required to apply for a license from the Federal Energy Regulatory Commission pursuant to the Federal Power Act.<sup>98</sup> It also needed to procure a permit from the U.S. Army Corps of Engineers for the discharge of dredged material into the Mississquoi River.<sup>99</sup> In 1992, after various phases of the project were considered and approved, the Corps issued a conditional authorization for the proposed project.<sup>100</sup>

Immediately after the Corps issued its authorization, the Abenaki Nation sought to enjoin defendants from all actions associated with the Corps's authorization for the Village to raise the spillway elevation of the hydroelectric facility. The tribe sued under a variety of statutes, including NAGPRA.<sup>101</sup> The tribe contended that the Corps's plan violated NAGPRA by leaving the fate of unearthed Indian remains and artifacts in the hands of the Corps, the State, and the Village.<sup>102</sup>

In assessing the Abenaki Nation's claims, the court noted that the Tribe's proposed construction of "federal control" would include the regulatory powers of the Corps, as well as its involvement in devising and supervising the construction plan.<sup>103</sup> Although the

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97. *Abenaki Nation of Mississquoi v. Hughes*, 805 F. Supp. 234 (D. Vt. 1992).

98. *Id.* at 237.

99. *Id.*

100. *Id.* at 239.

101. This court also questioned the standing of the Abenaki Nation because it "is not an 'Indian tribe' recognized by the Secretary of the Interior," but determined that it did "fall within the class protected by NAGPRA." *Id.* at 251. This case was decided prior to the promulgation of final rules implementing NAGPRA. In the preamble to the final rules, the Department of the Interior has taken the position that the term "Indian tribe" includes only federally recognized tribes, but that recognition may be through a federal agency other than the Bureau of Indian Affairs. 43 C.F.R. § 10.4 (2002).

102. *Abenaki Nation*, 805 F. Supp. at 251; see William A. Haviland & Marjory W. Power, *The Original Vermonters: Native Inhabitants, Past and Present* 264 (2d ed. 1994).

103. *Abenaki Nation*, 805 F. Supp. at 251–52.

court conceded that the possibility of unearthing cultural or funerary items at the site was “extremely high,” it ruled against the Tribe on its NAGPRA claim.<sup>104</sup> In so doing, the court held that, because the project was intended to take place on state-owned land,

[s]uch a broad reading [of “under federal control”] is not consistent with the statute, which exhibits no intent to apply the Act to situations where federal involvement is limited as it is here to the issuance of a permit. To adopt such a broad reading of the Act would invoke its provisions whenever the government issued permits or provided federal funding pursuant to statutory obligations.<sup>105</sup>

Thus, in the State of Vermont, which has no reservations and where the amount of federally owned land is quite small, the court declined to apply NAGPRA, depriving the Abenakis of any legal avenue to seek recovery of the remains.<sup>106</sup>

### 3. *Western Mohegan Tribe and Nation of New York v. New York*<sup>107</sup>

In 1986, the State of New York decided to turn Schodack Island, a series of connected peninsulas located on the eastern shore of the Hudson River, into a state park for recreational activities. From 1986 to 1989, the New York State Office of Parks, Recreation and Historic Preservation (OPRHP), the state agency with jurisdiction over the island, developed a master plan for the park that balanced recreational needs with concerns for environmental and cultural resources. The project was not active from 1989 to 1996, at which point the State renewed its interest in the park.<sup>108</sup> In 1999, OPRHP began construction of a bridge and a roadway for public access to the Park.

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104. *Id.* at 252.

105. *Id.*

106. Nichols et al., *supra* note 8, at 34.

107. 100 F. Supp. 2d 122 (N.D.N.Y. 2000), *rev’d in part by* W. Mohegan Tribe & Nation of N.Y. v. New York, 246 F.3d 230 (2d Cir. 2001). The appeals court did not reach the issue of NAGPRA’s applicability, as the Tribe had abandoned its NAGPRA claim on appeal. 246 F.3d at 232 n.1.

108. 100 F. Supp. 2d at 124.

In 2000, the Western Mohegan Tribe and Nation commenced a lawsuit against various defendants, including the State of New York, contending that Schodack Island held religious and cultural significance to the Tribe and that it should not be converted into a park. In particular, the Tribe objected because of its belief that one area of the island, south of the planned park site, was the location of a former Mahican village.<sup>109</sup> The Tribe alleged various claims, including violations of NAGPRA, and sought both to enjoin construction of the bridge connecting the mainland to the island and to order the OPRHP to conduct a new archeological survey.<sup>110</sup>

In assessing the Tribe's NAGPRA claim, the district court reiterated NAGPRA's geographical limitations, concluding, "the Island does not fall within the scope of NAGPRA's jurisdiction since it is neither federal nor tribal land within the statute's meaning."<sup>111</sup> The court did acknowledge the possibility of a broader construction of the Act, noting that, "[f]ederal lands are defined in relevant part as 'land other than tribal lands which are controlled or owned by the United States'."<sup>112</sup> Though the court recognized that "the Corps did issue a permit to Defendants to permit construction," it nevertheless found that the "permit does not transform the Island into federal property or place it under the United States' control." In conclusion, the court held that "[p]laintiffs' broad reading of the statute is inconsistent with NAGPRA's plain meaning and its legislative history where the language 'federal lands' denotes a level of dominion commonly associated with ownership, not funding pursuant to statutory obligations or regulatory permits."<sup>113</sup> Accordingly, the court denied the Tribe's claim.<sup>114</sup>

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109. The Tribe's status as a non-federally recognized Indian tribe played some role in the Court's reasoning. *Id.* at 128.

110. *Id.* at 125.

111. *Id.*

112. *Id.* (citing 25 U.S.C. § 3001(5) (2000)).

113. *Id.* at 125–26. The court denied the Tribe's claim under the National Historic Preservation Act on similar grounds, holding that the issuance of a permit by the Corps "is insufficient to transform the Park into a federal project." *Id.* at 127.

114. The court also found that there had been no discovery of human remains or funerary objects at that time, so the NAGPRA claim, even if it were to apply, was premature. *Id.* at 126.

#### 4. *Yankton Sioux:*<sup>115</sup> Measured Success

Since the enactment of NAGPRA over twelve years ago, only one published decision applying the Act to the future excavation of Indian remains and/or funerary objects has resulted in success for the tribe bringing suit.<sup>116</sup> But, as this case illustrates, even when a tribe is afforded all possible relief under the Act, NAGPRA's human rights aims remain unsatisfied.

Marked graves in the cemetery of White Swan Church date back as far as 1869. But the oral history of the Yankton Sioux describes the land near the church, including but not limited to the demarcated cemetery, as being used as a burial ground for tribal members at least since the late 1800s.<sup>117</sup> Some tribal members claim that the Tribe's oral tradition traces Sioux burials around the Church's landscape to prehistoric times.<sup>118</sup>

Though aware of the existence of the Indian cemetery, the United States filed a petition in 1949 to begin construction of Fort Randall Dam and Lake Francis Case on the site of the cemetery of White Swan Church. As part of the condemnation proceedings, the bodies were to be removed and reburied by the Corps pursuant to a Relocation Plan. However, the Corps failed to effect the removal and reburial of all the bodies in the cemetery.<sup>119</sup> In 1966, after Fort Randall Dam created the lake, a Corps memorandum indicated that a deer hunter reported that graves containing bones had been uncovered at the cemetery and the alternate flooding and drying of the cemetery site had made the outline of the graves easily discernable. As a result, thirty to forty of the graves had been unearthed, and bones were scattered on the ground around them.

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115. *Yankton Sioux Tribe v. U.S. Army Corps of Eng'rs*, 83 F. Supp. 2d 1047 (D.S.D. 2000).

116. At the time this Article was published, the Yankton Sioux had initiated a separate lawsuit to enjoin construction activities that it contended violated NAGPRA. Though the case has not been fully resolved, the District Court granted a preliminary injunction in favor of the Tribe based on its NAGPRA claim. See *Yankton Sioux Tribe v. United States Army Corps of Eng'rs*, 194 F. Supp. 2d 977, 986 (D.S.D. 2002).

117. *Yankton Sioux Tribe*, 83 F. Supp. 2d at 1048–49.

118. *Id.* at 1049.

119. *Id.*

The Corps removed the bones and reburied them in a new cemetery, but the partially revealed remaining bodies were not removed.<sup>120</sup>

Again in October of 1990, a Corps park ranger investigated the site based on reports from local fishermen that they had observed bones and casket parts along the shoreline. The ranger confirmed the fishermen's report, but the remains were merely covered with white fabric and were not removed. In December 1991, Corps personnel again visited the cemetery where they verified burials that had been missed by the contractor responsible for removal. Some new bones had been exposed since the investigation in 1990. The Yankton Sioux Tribe was apparently notified regarding the remains at that time but no action was taken.<sup>121</sup>

In 1999, another Corps park ranger observed remains and notified the Tribe. Shortly thereafter, the Tribal Council of the Yankton Sioux voted to file suit to stop the excavation of the bodies. Relying on NAGPRA, the Tribe sought time to remove the remains in accordance with its own traditions and customs. Further, the Tribe requested an injunction to prevent the Corps from raising the water level until the Tribe had enough time to complete religious ceremonies, consult with anthropologists, and determine the appropriate method for disposing of the remains. The Corps opposed all of the Tribe's requests for relief.<sup>122</sup>

The district court first considered whether the Corps had appropriately consulted with the Yankton Sioux regarding the intentional discovery and subsequently planned excavation of human remains on federal lands. Although tribal consent was not required for excavation, the Corps had a duty under NAGPRA to: (1) certify receipt of notification of the discovery; (2) take immediate steps, if necessary, to further protect the cultural items, including, as appropriate, stabilization or covering; (3) notify Indian tribes that might be entitled to ownership or control of the items under the Act; (4) initiate consultation with the appropriate tribe(s) regarding the inadvertent discovery; (5) follow the required procedures for excavation which includes refraining from raising and lowering the water levels of the lake over the cemetery for at least thirty days

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120. *Id.* at 1050–51.

121. *Id.*

122. *Id.* at 1051–53.

from the date of certification; and (6) ensure that proper disposition of the cultural items was carried out.<sup>123</sup>

The court found the Corps had fulfilled its duties in every respect. Although the Corps did not supply the Tribe with written notice of the discovery, the court nevertheless found that the Tribe had not been prejudiced and refused to grant additional time to protect and collect the remains. The court also determined that the thirty day cessation of activity dates from the time of certification of the discovery of the remains, not thirty days from the time the Tribe actually received notice. Accordingly, the tribe was afforded less time than the thirty days allotted by NAGPRA to devise a plan for disposition of the remains.<sup>124</sup> Because of the difficulty in exhuming some of the bodies, due to frozen ground and uncertain water levels, at the time the court's opinion was published, the Tribe and the government were participating in ongoing negotiations regarding removal of the remains.<sup>125</sup>

### C. Analyzing the Excavation Cases

In the first three cases discussed—*Castro Romero v. Becken*, *Abenaki Nation of Mississquoi v. Hughes*, and *Western Mohegan Tribe of New York v. New York*—the tribes were not even consulted regarding the fate of the embedded human remains. As a result, in *Castro Romero*, the Lipan Apache remains and funerary items exhumed during the building of a golf course were turned over to the City for reburial in a state cemetery.<sup>126</sup> And in *Abenaki Nation*,

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123. *Id.* at 1055.

124. *Id.* at 1057–58.

125. Kay Humphrey, *Efforts To Preserve Exposed Burial Sites Fuel Court Action*, Indian Country Today, Nov. 1, 2000, at 1. Following the court's decision, the U.S. Army Corps of Engineers (the Corps) filed a motion to dismiss the Tribe's claims for lack of subject matter jurisdiction or for summary judgment. The Corps argued that all of the relief available under NAGPRA had been granted to the Tribe because NAGPRA does not give the court the authority to address long-term protection of remains that may be exposed in the future. In its March 2002 opinion, the court denied the Corps's motions, holding that the Tribe had standing to pursue its claims under NAGPRA because there existed a "live case and controversy" in this action. The court held, further, that the Corps had not clearly satisfied its duty to protect the remains upon the lapse of the thirty day cessation of activity period. *Yankton Sioux Tribe v. U.S. Army Corps of Eng'rs*, 194 F. Supp. 2d 977, 985–86 (D.S.D. 2002).

126. *Castro Romero v. Becken*, 256 F.3d 349, 353 (5th Cir. 2001).

although the court admitted the likelihood of uncovering remains was “extremely high,” the Tribe was not allowed to participate in decisions concerning their disposition. Instead, any remains, if found, would become property of the State of Vermont, with their fate completely out of the Tribe’s hands.<sup>127</sup>

From one standpoint, the respective courts applied NAGPRA correctly in each case. After all, NAGPRA applies only to excavations on federal and tribal lands, and the courts found that there was insufficient federal control to bring the lands within the purview of the Act. Thus, the state and municipal governments were free to dispose of the remains according to their own devices, and without consideration for the tribes’ wishes. In light of current American legal principles, the results in these cases do not represent a departure from well-settled legal doctrine.

On the other hand, in each case, the courts had the opportunity to make choices as to the application of NAGPRA and the disposition of the remains, but opted, instead, to construe the Act as narrowly as possible, affording the tribes the least possible protection available under NAGPRA. Curiously, each court examined the tribes’ claims without regard for the historical context in which the violations arose. Federal Indian law is informed by and, in fact, can only be understood in the context of the turbulent relationship between Indian tribes and the U.S. government. This relationship is defined by a history of oppression, genocide, and reparations. This historical link has given rise to the judicially-constructed trust responsibility owed by the federal government to Indian nations, which has defined Indian-government relations for the past 200 years.<sup>128</sup> The trust doctrine, in essence, creates a fiduciary duty owed by the government to Indian tribes.<sup>129</sup>

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127. *Abenaki Nation of Mississquoi v. Hughes*, 805 F. Supp. 234 (D. Vt. 1992).

128. The concept of a federal trust responsibility to Indians evolved judicially. It first appeared in *Cherokee Nation v. Georgia*, 30 U.S. (5 Pet.) 1 (1831). For a complete history of the trust doctrine, see, for example, Mary Christina Wood, *Indian Land and the Promise of Native Sovereignty: The Trust Doctrine Revisited*, 1994 Utah L. Rev. 1471.

129. See *United States v. Mitchell*, 445 U.S. 535 (1980) (applying the trust doctrine to question of the government’s liability for its management of Indian natural resources); *Seminole Nation v. United States*, 316 U.S. 286 (1942) (invoking the trust doctrine in a case involving the application of fiduciary principles to the government in the administration of Indian affairs); *Menominee*

The *Abenaki Nation* court was the only one to even mention the trust doctrine, and, from the opinion, it would appear that its inclusion was almost inadvertent. In a brief footnote, the court summarily dismissed the Tribe's trust cause of action, holding that the Abenaki Nation's "violation of fiduciary duty claim is extremely nebulous and rehashes arguments that have been previously addressed."<sup>130</sup> The court did so without undertaking even a cursory examination of the historical relationship between the federal government and Indian tribes or of previous applications of the trust doctrine. Nor did the court even contemplate the possibility that the trust doctrine would necessarily be implicated where a federal agency was responsible for facilitating, supervising, and authorizing the project that resulted in the excavation of Indian human remains.

Also conspicuously absent from the three opinions is any discussion of the Indian canons of statutory construction. An extension of the trust doctrine, the Indian canons of construction require that enactments pertaining to Indian affairs are to be liberally construed for the benefit of Indian peoples and tribes.<sup>131</sup> Pursuant to this doctrine, ambiguous terms in federal laws are construed in favor of Indians, which results in broader statutory construction.<sup>132</sup> Construing NAGPRA consistent with the Indian canons has the potential to accommodate many claims by tribes to human remains.<sup>133</sup> Not surprisingly, however, none of the three

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Tribe v. United States, 101 Ct. Cl. 22 (1944) (applying the trust doctrine to the manner in which the United States has managed Indian property).

130. *Abenaki Nation*, 805 F. Supp. at 252 n.26.

131. Trope & Echo-Hawk, *supra* note 10, at 140.

132. The primary canons of construction in Indian law were first developed in cases involving treaties. For a recent application, see *Menominee Tribe v. United States*, 391 U.S. 404 (1968), which held that a 1954 statute terminating the federal trust relationship with the Menominee Tribe did not nullify the treaty rights of tribal members to hunt and fish on the reservation free from state regulation.

133. Because of unequal bargaining power between Indian nations and the federal government, canons of construction have evolved which favor the Indian tribes and by which treaties must be interpreted. The three canons by which all treaties are interpreted are (1) ambiguous expressions must be resolved in favor of the Indian parties concerned; (2) Indian treaties must be interpreted as the Indians themselves would have understood them; and (3) Indian treaties must be liberally construed in favor of Indians. See, e.g., Carpenter, *supra* note 63; Larry Echo-Hawk & Tessa Meyer Santiago, *Idaho Indian Treaty Rights: Historical Roots and Modern Applications*, Advocate (Idaho State Bar), Oct. 2001, at 15.

courts construing NAGPRA and interpreting the phrase “under federal control” even mentioned the Indian canons. In fact, when considering the Act in light of its implementing regulations, the courts found no ambiguity existed at all, and quickly dismissed the tribes’ NAGPRA claims.<sup>134</sup>

Even without reference to the trust doctrine or application of the Indian canons, however, due to the unique ownership status of the lands at issue, as well as the role of the federal government in approving the respective projects, each court could have found the lands to be “under federal control.”<sup>135</sup> In fact, determining that the lands met this definition would not have been inconsistent with the statute’s implementing regulations defining “control” as “lands not owned by the United States but in which the United States has a legal interest sufficient to permit it to apply these regulations without abrogating the otherwise existing legal rights of a person.” Nor would such a finding constitute a major departure from the U.S. Department of the Interior’s standard for application. Although the Department of the Interior’s definition focuses on lands in which the federal government either possesses title or holds a monetary stake, the Department of the Interior nevertheless made clear that each decision regarding “federal control” is to be made on a “case-by-case basis.”<sup>136</sup> But, instead of taking a broader view of ownership, each court confined itself to the strictest construction of the Act, as is so

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134. A resurgence of judicial activism has brought the viability of the Indian canons into question. In fact, recent Supreme Court decisions indicate that the country’s highest court may have abandoned the Indian canons altogether. See *Chickasaw Nation v. United States*, 534 U.S. 84 (2001). As esteemed Indian law scholar David Getches argues, in the past the Supreme Court “regularly employed canons of construction to give the benefit of doubt to Indians, and it deferred to the political branches whenever congressional policy was not clear. Now, these legal traditions are being almost totally disregarded.” David H. Getches, *Beyond Indian Law: The Rehnquist Court’s Pursuit of States’ Rights, Color-Blind Justice and Mainstream Values*, 86 Minn. L. Rev. 267, 268 (2001).

135. To the extent this Article raises issues that implicate the Fifth Amendment’s Takings Clause, those arguments are not fully considered here. However, a recent Supreme Court opinion on the subject indicates that application of NAGPRA, even on private land, likely would not violate the Takings Clause. See *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Planning Agency*, 533 U.S. 948 (2002).

136. See Suagee, *supra* note 44, at 205 (citing Native American Graves Protection and Repatriation Act Regulations, 60 Fed. Reg. 62,134-01, 62,139 (Dec. 4, 1995)).

aptly captured in the court's opinion in *Mohegan Tribe*, where the court held that "federal lands' denotes a level of dominion commonly associated with ownership, not funding pursuant to statutory obligations or regulatory permits."<sup>137</sup>

While NAGPRA's shortcomings are evident in the first three cases, *Yankton Sioux Tribe v. United States Army Corps of Engineers* raises other concerns. After all, insofar as *Yankton Sioux* was a case about NAGPRA, it represents a victory for the Tribe. Full execution and utilization of the Act's enforcement mechanisms allowed the Tribe all possible relief at the district court level. The Yankton Sioux received notification of the discovery as well as an opportunity to remove the remains of their ancestors who had floated to the water's surface during the government's flooding of Lake Francis Case. They were allowed to rebury their dead with dignity pursuant to their own religious ceremonies and traditions and accompanied by essential funerary objects.<sup>138</sup> Yet, from a human rights perspective, even the victory in *Yankton Sioux* rings hollow.

If *Yankton Sioux* is understood as the watermark for all possible relief allowed under NAGPRA, the question persists: why are courts, when given an opportunity to protect human rights, so reluctant to apply NAGPRA to future excavations? If nothing else, *Yankton Sioux* proves that, even where a tribe is granted relief under the Act, the most significant obstacle a project will face is a thirty day cessation of activity for tribes and federal agencies to devise a plan for recovery of remains. In light of the fact that the projects at issue in both *Abenaki Nation* and *Mohegan Tribe* had been pending for over ten years, the imposition of a thirty day wait appears negligible. And NAGPRA imposes no consent requirement, even in cases involving federal lands. Thus, while the burden on the land owners would have been minimal, the relief for the Tribe, even though clearly less than ideal, would have been significant.

Yet courts consistently reason around NAGPRA's application in the excavation context, despite the overwhelmingly negative

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137. W. Mohegan Tribe & Nation of N.Y. v. New York, 100 F. Supp. 2d 122, 125 (N.D.N.Y. 2000). The court denied the Tribe's claim under the National Historic Preservation Act on similar grounds, holding that the issuance of a permit by the Corps "is insufficient to transform the Park into a federal project." *Id.* at 127.

138. *But see Humphrey, supra* note 125 (discussing the U.S. Army Corps of Engineers's efforts to avoid its responsibilities pursuant to NAGPRA).

cultural consequences for the tribes. It seems that when Indian cultural survival or political sovereignty is at issue, courts neglect to recount the many instances in American law that reflect the willingness of our judicial system to restructure and overhaul traditional property regimes to avoid undesirable social consequences.<sup>139</sup> For example, when Americans finally rejected racial segregation as a form of social life, Congress enacted public accommodations statutes that limited property owners' power to exclude.<sup>140</sup> Similarly, efforts to bar unreasonable restraints on alienation of property resulted in the emergence of common law property doctrines, such as the rule against perpetuities.<sup>141</sup> And zoning laws demonstrate that, in some situations, the full enjoyment of property rights is only possible by agreeing to certain property limitations.<sup>142</sup>

Property regimes, like all other social spheres of life, are regulated and defined in accordance with society's values.<sup>143</sup> The courts' treatment of NAGPRA in these cases reflects the elevated status of individual property rights that exists in the classical property model. The courts parsed out entitlements and granted to the individual property owners possession of, and title to, all embedded property.<sup>144</sup> But, as these cases demonstrate, particularly when the property rights and human rights of indigenous communities are at stake, entitlement cannot and should not always be defined by reference to ownership alone.<sup>145</sup>

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139. See Jane B. Baron, Review Essay, *The Expressive Transparency of Property*, 102 Colum. L. Rev. 208 (2002).

140. *Id.* at 209.

141. *Id.* at 208–09, 215–16.

142. See Tsosie, *supra* note 35, at 1301.

143. See Joseph William Singer, *The Edges of the Field: Lessons on the Obligations of Ownership* 10 (Beacon Press, 2000) (2000) [hereinafter Singer, *Edges of the Field*]; Joseph William Singer, *Property and Social Relations, in Property and Values: Alternatives to Public and Private Ownership* 20 (Charles Geisler & Gail Daneker eds., 2000) [hereinafter Singer, *Property and Social Relations*].

144. Patty Gerstenblith, *The Public Interest in the Restitution of Cultural Objects*, 16 Conn. J. Int'l L. 197, 229 (2001).

145. See Baron, *supra* note 139, at 217.

#### IV. HUMAN RIGHTS AND PROPERTY RIGHTS: LEARNING FROM AWAS TINGNI

While often perceived as too remote or inaccessible to protect tribes' interests in cultural survival effectively, international law, in fact, provides a workable framework for the protection of indigenous peoples' rights.<sup>146</sup> For example, under most major international instruments that address human rights, property ownership is often identified as a basic human right.<sup>147</sup> Article 21 of the American Convention on Human Rights guarantees the right to use and enjoy one's property free from deprivation of property without compensation, and the Universal Declaration on Human Rights enumerates rights to property ownership. Other international human rights documents are in accord.<sup>148</sup>

Property rights are intimately tied to human rights. Thus, the deprivation of property rights has come to be seen, in itself, as a serious human rights abuse.<sup>149</sup> The ability to hold property and wield power is essential to the exercise of other basic human rights.<sup>150</sup> Property rights empower groups to function as "economic actors," which is essential to self-determination and sovereignty.<sup>151</sup> This

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146. Rebecca Tsosie, Preserving Tribal Cultural Heritage Through Cultural Property Laws 239 (2002) (draft conference paper presented at the Federal Bar Conference on Indian Law, on file with author).

147. American Convention on Human Rights, *opened for signature*, Nov. 22, 1969, art. 21, O.A.S.T.S. No. 36, at 7, 1144 U.N.T.S. 143, 150 (entered into force July 18, 1978); *Universal Declaration on Human Rights*, G.A. Res. 217A, U.N. GAOR, 3d Sess., art. 2, U.N. Doc. A/810 (1948).

148. See e.g., American Declaration of the Rights and Duties of Man, O.A.S. Res. XXX, 9th Int'l Conference of American States, art. 23, O.A.S. Official Record, OEA/Ser.L/V.II.23, doc.21 rev.6 (1948), reprinted in Basic Documents on Human Rights 488, 492 (Ian Brownlie ed., 3d ed. 1992) (asserting the right of every person "to own such private property as meets the essential needs of decent living and helps to maintain the dignity of the individual and the home"); Lara L. Manzione, *Human Rights in the Kingdom of Nepal: Do They Only Exist On Paper?*, 27 Brook. J. Int'l L. 193, 196 (2001).

149. Kurshan, *supra* note 6, at 355; see Jay M. Vogelson, *Women's Human Rights*, 30 Int'l Law. 209, 210 (1996) ("Generally, the right of an individual to own some property and not be deprived of it arbitrarily is recognized as a human right.").

150. Kurshan, *supra* note 6, at 357; see Barzel, *supra* note 6, at 4 ("The distinction sometimes made between property rights and human rights is spurious. Human rights are simply part of a person's property rights.").

151. Kurshan, *supra* note 6, at 357.

phenomenon operates even more significantly with regards to indigenous peoples, whose culture, religion, and political autonomy are particularly linked to the preservation of communal property and a traditional tribal land base. International instruments, too, reflect the unique status of indigenous peoples in relation to the land. The International Labor Organization's Convention on Indigenous and Tribal Peoples of 1989, for example, affirms the specific right of ownership and possession of indigenous peoples to the lands they have traditionally occupied.<sup>152</sup> In this regard, the contemporary international human rights movement has recognized indigenous peoples as special subjects of concern.<sup>153</sup>

Although the battle to maintain a traditional land base differs in some respects from efforts to preserve cultural property, in both cases indigenous peoples have struggled with Western legal systems, which devalue, if not completely ignore, communal ownership. Both areas of collective tribal ownership serve as a source of Indian cultural integrity, self-determination, and sovereignty. But indigenous peoples have had difficulty with communal property claims because Western law often fails to acknowledge the common ownership of property.<sup>154</sup> Additionally, communal ownership and collective tribal power have long been viewed as a threat to mainstream society.<sup>155</sup> In fact, many of the destructive assimilationist policies imposed on Indians in the United States were the result of the government's desire to destroy collective Indian ownership and group identity.<sup>156</sup>

Rights to cultural property and a traditional land base are similar in another important respect as well. In regards to indigenous peoples, property rights are often sought—such as in the NAGPRA excavation cases—in circumstances in which indigenous peoples do not hold title to the property they seek to obtain. Because ownership in Western law is virtually always determined according

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152. See Anaya, *supra* note 30, at 7.

153. S. James Anaya & Robert A. Williams, Jr., *The Protection of Indigenous Peoples' Rights Over Land and Natural Resources Under the Inter-American Human Rights System*, 14 Harv. Hum. Rts. J. 33 (2001).

154. Hutt, *supra* note 28, at 39.

155. See Anaya & Williams, *supra* note 153, at 44 ("[T]raditional [indigenous] land tenure generally is understood as establishing the collective property of the indigenous community and derivative rights among community members.").

156. See Tsosie, *supra* note 35, at 1294–96.

to title, this has been a great source of mass divestiture of property from Indian peoples since the point of European contact.<sup>157</sup>

Accordingly, indigenous peoples' efforts to protect their traditional lands provide a constructive and informative paradigm in the struggle to preserve cultural property. Despite facing great challenges in this regard under American law, a communal right to indigenous peoples' traditional lands is now finding recognition in international law. In the Fall of 2001, the Inter-American Court on Human Rights decided the groundbreaking *Case of the Mayagna (Sumo) Awas Tingni Community v. Nicaragua*. The case revolved around efforts by the Awas Tingni and other indigenous communities of Nicaragua's Atlantic Coast to demarcate their traditional lands and to prevent logging in their territories by a Korean company under a government-granted concession.<sup>158</sup> The Awas Tingni filed a petition with the Inter-American Commission on Human Rights (Commission), charging Nicaragua with failure to take steps necessary to secure the land rights of the Mayagna (Sumo) indigenous community of Awas Tingni and of other Mayagna and Miskito indigenous communities in Nicaragua's Atlantic Coast region.<sup>159</sup>

Evidence presented before the court included the oral testimony of members of the Awas Tingni community. Jaime Castillo Felipe, member of the Mayagna ethnic group, and lifetime resident of Awas Tingni, testified regarding the Tribe's ownership of the disputed territories. In explaining why he believed that the Tribe owned the land, he stated that they "have lived in the territory for over 300 years and this can be proven because they have historical places and because their work takes place in that territory."<sup>160</sup> Felipe explained that the community, as with most traditional indigenous societies, held land and resources in common and are occupied and utilized by the entire community.<sup>161</sup> Other tribal members testified similarly regarding the significance of the land to the religion and

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157. *See id.*

158. Anaya & Williams, *supra* note 153, at 37–38.

159. *Id.*

160. The Mayagna (Sumo) Indigenous Community of Awas Tingni v. Nicaragua, 79 Inter-Am. Ct. H.R. (ser. C) (Aug. 31, 2001), ¶ 83(a), available at [http://www.corteidh.or.cr/seriecing/serie\\_c\\_79\\_ing.doc](http://www.corteidh.or.cr/seriecing/serie_c_79_ing.doc).

161. *Id.* ("Nobody owns the land individually; the land's resources are collective.").

cultural survival of the Awas Tingni people and their conceptions of collective ownership of the land and all the resources it encompasses:

The territory of the Mayagna is vital for their cultural, religious, and family development, and for their very subsistence, as they carry out hunting activities (they hunt wild boar) and they fish (moving along the Wawa River), and they also cultivate the land. It is a right of all members of the Community to farm the land, hunt, fish, and gather medicinal plants; however, sale and privatization of those resources is forbidden.<sup>162</sup>

Despite the Tribe's intimate relationship with the land—which evidence demonstrated is sacred and beautifully symbiotic—it was up to the court to determine who owned the lands on which the Tribe resided. The Awas Tingni claimed they had occupied and, thus, quasi-owned the lands for hundreds of years, but could only present oral history as evidence of their presence on those lands prior to 1990.<sup>163</sup> In its factual findings, the Inter-American Commission had determined that the community had "no formal title nor any other instrument recognizing its right" to the lands it claimed.<sup>164</sup>

Nevertheless, in an unprecedented decision, the court ruled that the State violated, among others, the right to property as contained in Article 21 of the American Convention on Human Rights to the detriment of the members of the Mayagna (Sumo) community of Awas Tingni, and required the State to adopt measures to create an effective mechanism for official recognition, demarcation and titling of the indigenous community's properties.<sup>165</sup> In particular, the Court acknowledged the Awas Tingni's communal form of property in the land and recognized the importance of the protection of this right to ensure the Community's cultural survival:

Indigenous groups, by the fact of their very existence, have the right to live freely in their own territory; the close ties of indigenous people with the land must be recognized and understood as the fundamental basis of their cultures, their spiritual life, their integrity, and their economic survival.

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162. See, e.g., *Starr v. Starr*, 1999 WL 1610554 (Scot. O.H. Apr. 8, 1998).

163. The Mayagna (Sumo) Indigenous Community of Awas Tingni v. Nicaragua, 79 Inter-Am. Ct. H.R. (ser. C) (Aug. 31, 2001), ¶ 83(c), available at [http://www.corteidh.or.cr/seriecing/serie\\_c\\_79\\_ing.doc](http://www.corteidh.or.cr/seriecing/serie_c_79_ing.doc).

164. *Id.* ¶ 104(l).

165. *Id.* ¶ 153.

For indigenous communities, relations to the land are not merely a matter of possession and production but a material and spiritual element which they must fully enjoy, even to preserve their cultural legacy and transmit it to future generations.<sup>166</sup>

Virtually every aspect of *Awas Tingni* is remarkable. While it may be dismissed as an aberration insofar as it deviated from Western property ideals in granting the community the right to their continued existence on their traditional lands as tribal peoples, it serves as a model of possibilities. Drawing from oral history and demonstrating a belief in the right of indigenous peoples to exist, *Awas Tingni* proves that well-settled legal principles can give way to indigenous peoples' fight for survival, even when human rights and Western property regimes conflict.

## V. ENTITLEMENT, PROPERTY, AND OWNERSHIP

### A. Considering New Models

The "traditional" or "classical" model of property upon which Anglo-American property law is based rests on the notion "that property rights identify a private owner who has title to a set of valued resources with a presumption of full power over those resources."<sup>167</sup> The classical view assumes consolidated rights and a single, identifiable owner of those rights who is identifiable by formal title rather than by information relations or moral claims. It also assumes rigid, permanent rights of absolute control conceptualized in terms of boundaries that protect the owner from non-owners by granting the owner the absolute power to exclude non-owners, and the full power to transfer those rights completely or partially on such terms as the owner may choose.<sup>168</sup> As such, the current property system is designed only to protect those with property, not those without it.<sup>169</sup>

Judicial application of the classical model of property is responsible for a myriad of legal decisions that either devalue or

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166. *Id.* ¶ 104(n).

167. Singer, *Property and Social Relations*, *supra* note 143, at 4.

168. *Id.* at 5.

169. *Id.*

altogether disregard the rights of indigenous peoples.<sup>170</sup> In this respect, many judicial opinions concerning Indians that have diminished tribal rights, particularly in regards to Indian efforts to prevent the destruction of sacred sites or thwart intrusive land development, might be explained as the application of the historically austere Anglo-American right of private property, which includes a belief in the owner's right to control property uses as the owner wishes.<sup>171</sup> Courts adhering strictly to this model grant legal preference to private property owners above all other interests, often equating "title" with "entitlement." This has been the case even when the federal government holds title, and ostensibly, has a greater obligation to consider the interests of society's members.<sup>172</sup>

The application of a traditional property model by courts is illustrated by NAGPRA. For example, the Department of the Interior's definition of "federal control," as it is applied in the context of NAGPRA, operates within a very narrow framework, one obviously rooted in the Anglo-American system. Under the guidelines promulgated by the Department of the Interior, "control" is equated with title, ownership, or evidence of some other form of pecuniary stake.<sup>173</sup>

The classical property model is not without criticism. Contemporary scholarship posits that the classical property model is distorted and misleading because it is descriptively inaccurate and normatively flawed.<sup>174</sup> In particular, because state regulation and state recognition actually give rise to property rights, it is wrong, some scholars argue, to envision property and regulation as

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170. See, e.g., *Lyng v. N.W. Indian Cemetery Prot. Ass'n*, 485 U.S. 439 (1988) (holding that the Free Exercise Clause did not prohibit the government from certain kinds of land development despite tribal interests); Howard J. Vogel, *The Clash of Stories At Chimney Rock: A Narrative Approach to Cultural Conflict over Native American Sacred Sites on Public Land*, 41 Santa Clara L. Rev. 757, 789 (2001) ("*Lyng* is the most recent case in a very old story about the coercive transformation of Native American understandings of land to conform to the Anglo-American understanding of land familiar to students of property law.").

171. See *Tsosie, supra* note 35, at 1304–05.

172. See *Lyng*, 485 U.S. at 453 (concluding "[w]hatever rights the Indians may have to the use of the area, however, those rights do not divest the Government of its right to use what is, after all, its land"); Vogel, *supra* note 170, at 789.

173. 43 C.F.R. § 10.12 (2002); see *Suagee, supra* note 44, at 205.

174. Singer, *Property and Social Relations*, *supra* note 143, at 5.

opposites, rather than interrelated components of society's recognition of ownership.<sup>175</sup> In practice, an owner's use of property is limited (or should be) when such use may adversely affect others or society at large.<sup>176</sup> Property has always been, then, not "a domain of freedom into which regulation intrudes. Rather, property is constituted by and suffused with regulation."<sup>177</sup>

In response to perceived social injustice fueled by the classical model of property, modern scholars and critics of the classical system have devised new theories of property and entitlement, which exemplify a renewed interest in the obligations of owners.<sup>178</sup> From this perspective, "[e]ach stick in the bundle of rights that describes property ownership is defined, directly or indirectly, in terms of the relationship between the owner and others."<sup>179</sup> Because only the recognition of property rights by society gives property meaning and definition, this scholarship seeks to reconceptualize property as a system of social relations.<sup>180</sup>

Although variations on this property model are evidenced throughout modern legal scholarship, property rights theorist Joseph Singer first articulated and advocated for the social relations theory of property. Singer's theory asserts that property is not merely an individual right, but is, in fact, "an intensely social institution."<sup>181</sup> As such, under the social relations model, strict individualism is tempered by significant communal responsibility.<sup>182</sup> The model requires balance between the rights and obligations of property owners. According to Singer, property rights must not be viewed alone in a vacuum, but must achieve a delicate balance: "On one side are claims of property; on the other side are claims of humanity. On

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175. Baron, *supra* note 139, at 217–18.

176. See Scafidi, *supra* note 32.

177. Baron, *supra* note 139, at 211.

178. See, e.g., Tsosie, *supra* note 35, at 1308–09 (arguing for the application of an "intercultural understanding of property" which would accommodate indigenous worldviews and values).

179. Scafidi, *supra* note 32, at 797.

180. See Tsosie, *supra* note 35, at 1301.

181. See Singer, *Edges of the Field*, *supra* note 143, at 20.

182. *Id.* at 3.

one side are claims to rights; on the other side are acknowledgments of responsibilities.”<sup>183</sup>

It is through the imposition of obligations, Singer argues, that balance is created in the social system. If property systems grant ownership rights to individuals but do not impose corresponding obligations and limitations, relationships among rights holders are skewed and unbalanced. Because the exercise of rights by one affects others, Singer’s theory maintains that legal rights:

must be shaped to create an environment that will allow individuals both to obtain access to property and to enjoy their legal rights without unreasonable interference by others. This means that the rights of each must be curtailed to ensure an environment that allows all others to exercise their rights fully. Rights must be limited to protect rights.<sup>184</sup>

Singer contends that property is necessary to exercise liberty and freedom. Thus, property systems should be designed to protect both those who have property and those who do not.<sup>185</sup>

Rather than envisioning the imposition of obligations on property owners as inhibiting freedom, Singer’s model functions on the premise that greater restrictions and limitations on property owners actually promote liberty. Singer posits that possession of property is essential for individuals and groups to become economic actors and fully participate in society because the recognition of property, even if through regulation, promotes liberty and equality for all peoples.<sup>186</sup>

Thus, Singer concludes, the “paradox” of property is the tenuous relationship between ownership and obligation. As people living together in communities, the fate of every person is tied to the fate of others.<sup>187</sup> It is this relationship among people within the

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183. *Id.* at 10.

184. Singer, *Property and Social Relations*, *supra* note 143, at 20.

185. Singer, *Edges of the Field*, *supra* note 143, at 27 (quoting Jeremy Waldron as stating that “[p]eople need private property for the development and exercise of their liberty; that is why it is wrong to take all of a person’s private property away from him, and that is why it is wrong that some individuals should have no private property at all”).

186. *Id.* at 17.

187. *Id.* at 20.

context of laws that gives property value.<sup>188</sup> Singer's model "reconceptualizes property as a social system composed of entitlements that shape the contours of social relationships. It involves, not relations between people and things, but among people."<sup>189</sup>

#### B. NAGPRA Excavation Redux—Possibilities in Light of New Models

Models that balance property owners' rights with their obligations facilitate a shift towards less rigid property conceptions necessary to protect the human rights of indigenous peoples. If property is, in essence, a social system, then it creates a "web of communal rights and responsibilities."<sup>190</sup> In such a system, title does not always give rise to entitlement.<sup>191</sup> At a minimum, obligations accompany ownership, and responsibilities arise out of the exercise of rights.

Mistakenly, a common response to NAGPRA is the assumption that application of more fluid property conceptions will result in Tribe's having "veto-power" over any project, even those occurring on private land, if Indian remains are discovered. As this paper has demonstrated, particularly in light of the court's holding in *Yankton Sioux*, that is certainly not the case. Construction on the dam and the lake at issue in *Yankton Sioux Tribe v. United States Army Corps of Engineers* began in 1950. In addition to flood control and generation of hydroelectric power, the project provides navigation support and irrigation, while subsidizing the municipal water supply.<sup>192</sup> Moreover, the Indian cemetery had been under water for over forty years by the time the Tribe filed the lawsuit. Thus, abandoning the project would be illogical, if not impossible. Nor is that result mandated by application of the social relations theory of property. On the contrary, Singer's theory is meant only to encourage a reconsideration of entitlement when allocating the rights and

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188. *Id.* at 82.

189. Singer, *Property and Social Relations*, supra note 143, at 8.

190. Scafidi, *supra* note 32, at 797.

191. Baron, *supra* note 139, at 217.

192. See U.S. Army Corps of Engineers, Fort Randall Dam/Lake Francis Case, at [http://www.nwo.usace.army.mil/html/Lake\\_Proj/fortrandall/welcome.html](http://www.nwo.usace.army.mil/html/Lake_Proj/fortrandall/welcome.html) (last visited Oct. 10, 2002).

responsibilities of ownership. Thus, in *Yankton Sioux*, application of Singer's theory would merely have required a contemplation of the rights and responsibilities of the real property holders vis-à-vis the Tribe's claim to the human remains and other embedded property. One possible result, then, would have been the creation of an excavation plan that allowed the Yankton Sioux sufficient time to exhume the bodies and funerary objects in a manner consistent with their own customs and tribal beliefs.<sup>193</sup>

Accordingly, the social relations theory of property, which is meant only to provide an alternative framework through which rights, ownership, and entitlements are viewed, is not intended to redistribute property or trample on the rights of title holders. To the contrary, as Singer explains: "This model suggests that property which is used in a way that affects the interests of non-owners or the community at large can be regulated in a way that responds to public policy concerns without impinging illegitimately on the owner's property rights."<sup>194</sup>

In this regard, even if courts were to contemplate the social relations theory when considering NAGPRA's applicability, it would be possible to do so while preserving the title holder's property rights. After all, in the excavation context, NAGPRA, at best, allows for notification, consultation, and the right of Tribes to remove their ancestors properly and prepare them for reburial. It does not serve as a trump card for tribes to exercise control over lands to which they do not possess title.

Even with these limitations in mind, however, because the social relations theory of property envisions property rights beyond those which are dictated by a strict adherence to legal title analysis, its contemplation by the courts in deciding the excavation cases would have allowed them greater latitude to apply NAGPRA. Undoubtedly, had the courts contemplated non-traditional models of property, they would have had greater flexibility in considering factors other than legal title in allocating rights to the embedded human remains and funerary objects. As this Article has demonstrated, a finding that the land was, in fact, "under federal control" was plausible in each case. But the courts' failure to consider

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193. Sadly, even though NAGPRA was applied, that result was not reached. See Humphrey, *supra* note 125, at 1.

194. Singer, *Property and Social Relations*, *supra* note 143, at 7.

the responsibilities—rather than merely the rights—of the property owners facilitated a finding that NAGPRA did not apply.

Of the excavation cases, *Castro Romero v. Becken* demonstrates the most extreme departure from the social relations theory of property. There, the court looked only at the rights of the title holders, and a finding that the land was “municipal rather than federal or tribal” allowed the court to ignore the responsibilities that necessarily followed from the real property owner’s rights. Had the court viewed the plaintiff’s claims through the lens of the social relations model, perhaps it would have more thoughtfully contemplated the title holder’s responsibility to the Lipan Apache as a people, the living descendants of those who had died, and the rights of the deceased themselves.<sup>195</sup> Ironically, the court allowed the City—based solely on its title to the land—to exhume the bodies and rebury the remains in its own cemetery. In so doing, the court confirmed the City’s rights, but not responsibilities, to the human remains.

*Awas Tingni* is instructive here as well. Although the court did not expressly apply the social relations theory, it rejected a strictly title-based analysis in determining the respective rights of the *Awas Tingni* Community vis-à-vis the State. The Court expressly held that the Community’s own conceptions of ownership must be taken into account in determining whether a violation of the right to property existed, and, in so doing, concluded that the Community’s lack of real title to the property did not preclude the Community’s continued right of occupancy.<sup>196</sup> The Court’s willingness to look beyond the issue of title and consider other factors—such as the ambiguous ownership status of the lands occupied by but not “owned” in the traditional sense by the *Awas Tingni* Community—allowed it the flexibility to accommodate the property rights and human rights of the Community. Had the Court taken the same strict title-based approach as the courts in the excavation cases, it likely would have found no ambiguity existed at all, and the *Awas Tingni*’s lack of proof of ownership over their ancestral lands would have precluded the

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195. Although the Fifth Circuit’s opinion does not fully discuss the issue, it is clear that the federal district court denied *Castro Romero*’s attempt to bring this suit on behalf of the Lipan Apache people. Accordingly, this suit was brought by Castro individually. *Castro Romero v. Becken*, 256 F.3d 349, 354 (5th Cir. 2001).

196. The Mayagna (Sumo) Indigenous Community of *Awas Tingni v. Nicaragua*, 79 Inter-Am. Ct. H.R. (ser. C) (Aug. 31, 2001), ¶ 151, available at [http://www.corteidh.or.cr/seriecing/serie\\_c\\_79\\_ing.doc](http://www.corteidh.or.cr/seriecing/serie_c_79_ing.doc).

Tribe's claims to the land and their continued existence.

Likewise, the courts in the excavation cases could have taken the Department of the Interior's mandate that each situation be treated on a case-by-case basis and recognized the ambiguous ownership status of the lands and property at issue. Instead, the courts failed to thoughtfully question the level of control exerted by the federal government, and U.S. Army Corps of Engineers in particular, over the projects. In so doing, they failed to undertake the more thorough and, indeed, more complicated analysis that would have been required to conclude that NAGPRA was applicable.

I do not mean to suggest, however, that consideration of new property models will ensure NAGPRA's applicability in every circumstance. To the contrary, the U.S. Army Corps of Engineers had various levels of participation in the three projects at issue in the excavation cases and unique facts existed as to each of the tribes' claims. While the facts of each case likely could have supported a finding that the lands were "under federal control" and, therefore, subject to NAGPRA, that analysis is one that must be undertaken by the trial court. Nevertheless, the courts' decisions indicate an unwillingness to view the claims of the tribes, and the status of the lands at issue, beyond the confines of the classical property model. Consideration of new models, then, while not guaranteeing different outcomes, would have at least opened up new possibilities for creating a greater balance between the obligations of property owners and the rights of indigenous peoples.

### C. Broader Applications: Beyond the Excavation Cases

Disputes over property between non-Indians and Indians rage on in the modern United States. Indigenous property claims—often based on conceptions of communal ownership, preexisting occupation, or political sovereignty—are foreign to non-Whites, and, thus, are often diminished or disregarded when contested by individual owners. Conflicts arise almost daily as indigenous peoples attempt to reclaim ancestral homelands or preserve sacred sites. These struggles are particularly compelling in a time in which Americans are increasingly driven to acquire more and greater material goods, an ethos signified by popular culture's quasi-deification of individual property rights.

For example, Congress recently enacted the Sand Creek Massacre National Historical Site Establishment Act of 2000, which

will establish a permanent memorial at the site of the 1864 massacre of the Cheyenne and Arapaho Indians near Eads, Colorado, by members of the local government's militia. The legislation contemplates the demarcation of an area of approximately 12,480 acres along Sand Creek in Kiowa County, Colorado, to serve as the boundary of the historic site. As part of the Sand Creek Massacre National Historical Site Establishment Act, the National Park Service is authorized to negotiate with "willing settlers" for property within the boundary.<sup>197</sup>

Completion of the memorial requires acquisition of 1400 acres containing numerous cultural and historic sites that are currently held by a private land owner. The owner, although claiming he would like to see the land be used for the memorial, has placed his land up for public sale because he was not able to strike a deal with the National Park Service, which offered \$332,000 for the property. The rancher has requested \$1.5 million for the property, five times the offered price and more than five times the average per-acre land value in Kiowa County.<sup>198</sup> Thus, completion of the memorial was stymied as the tribes and the National Park Service negotiated for acquisition of the sacred lands.<sup>199</sup>

In another land dispute, the Eight Northern Pueblo Council (the Council) is fighting to block expansion of a new, unplanned road that was built along the boundaries of the Petroglyph National Monument, a site considered sacred to dozens of tribes in the Southwest.<sup>200</sup> The 3000-year-old petroglyphs are the work of the Anasazi people, ancestors of the nineteen Indian Pueblos in New Mexico, and represent visions and messages to the spirit world left by indigenous ancestors. The area has long been used for prayers, offerings, and gathering medicinal plants. The road, which is being funded by a private land developer, was built without the knowledge

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197. Bryan Stockes, *Sand Creek Historic Landmark a Reality*, Indian Country Today, Nov. 8, 2000, at 1.

198. David Melmer, *Owner Stalls Sand Creek Historic Site*, Indian Country Today, Mar. 19, 2002, at B1.

199. Before publication of this Article, a private donor bought the land needed for completion of the Sand Creek Massacre Memorial and turned it over to the Tribe. David Melmer, *Sand Creek Returned to Rightful Owners*, Indian Country Today, May 6, 2002, at B1.

200. Valerie Taliman, *Mayor "Sneaks" In Petroglyph Road*, Indian Country Today, Sept. 16, 2002, at 1.

or input of local tribes and a variety of other interested groups, including the National Park Service, which manages the site. The road was quietly authorized by the Mayor of Albuquerque, New Mexico and was, literally, built overnight. Though initially claiming the road was to be used temporarily to ease traffic delays, the Mayor now concedes the current plan is to expand the road to a full artery with bike lanes that will run right near the sacred site. Many fear additional traffic will lead to further defacement and desecration of the ancient petroglyphs.

The Council is considering legal action to protect the area. The private development company that owns the land has no legal duty to protect or preserve the adjacent sacred site. As a result, those opposing further development will likely find no relief in the courts.

The battle for completion of the Sand Creek Massacre Memorial and the struggle to protect the sacred petroglyphs of the Anasazi signify the types of contemporary property conflicts that persist between Indians and non-Indians. The disputes are complicated, and satisfactory resolutions are not easily achieved. It is clear, however, that Indians must attempt to build public awareness of the "profound historical meanings, and wider cultural and artistic significance of Native American cultural landscapes."<sup>201</sup> Several Indian scholars have suggested that storytelling may be the best way to convey basic Indian values and help close the gap between Anglo-American law and the Indian worldview.<sup>202</sup> However that goal is reached, it is clear that indigenous peoples' perspectives regarding conceptions of entitlement, property, and ownership must be addressed if there are to be any remedies daring enough to encompass the complex history and claims of indigenous peoples.

## VI. CONCLUSION

All the laws and armies in the world cannot protect the earth as fully as the joy people take in discovering and honoring what is sacred. All of the laws and armies in the

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201. Suagee, *supra* note 44, at 224 ("There is a resonance in our stories that I believe will come back to us in a good way. Our stories may be some of the best means we have to animate federal agency land management decisionmaking processes so that federal decisions reflect some of our values.").

202. Barsh, *supra* note 69, at 153–54.

world cannot protect the earth fully if humans are empty and believe that nothing is sacred.<sup>203</sup>

The human rights of indigenous peoples will never be fully recognized or restored as long as individual property rights are exalted and analyzed in a vacuum where they exist only as "entitlements," without the imposition of duties in the social system. As this article demonstrates, without incorporation of indigenous perspectives in the construction of property paradigms, non-traditional property conceptions will never inform the legal regimes responsible for recognition and protection of the property rights of Indian peoples.

It may be impossible for indigenous peoples to ever fully convey to non-Indians the historical power and cultural meaning inherent in Indian cultural property. Communal, land-based peoples conceive of and interpret ownership in ways that are foreign to, and diminished by, Anglo-American property regimes. Nevertheless, NAGPRA provides a framework for a dialogue between Indians and non-Indians in the protection of cultural property.<sup>204</sup> Although limitations on NAGPRA, both in its construction and application, are readily apparent, NAGPRA has at least begun to address complex issues of self-determination and the survival of political sovereignty through the preservation of cultural identity. In many ways, NAGPRA marks the inception of a genuine, ongoing dialogue between Indian tribes and governmental entities.<sup>205</sup>

Moreover, NAGPRA has served as an invaluable tool in educating non-Indians in the brutal history of Indian peoples, the significance of cultural property to Indian cultural survival, and the importance of reconsidering entitlement as it relates to indigenous peoples' continued existence. As Elizabeth Tatar, Vice President of the Bishop Museum in Honolulu, Hawaii, explained regarding the enactment of NAGPRA:

We were fearful of Native Hawaiians and Native Americans, and of spirituality. We did not truly understand that the human remains and objects in our collections were living to those that claimed them and that Native

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203. Erica-Irene A. Daes, *The Indispensable Function of the Sacred*, 13 St. Thomas L. Rev. 29, 31 (2000).

204. Hutt & McKeown, *supra* note 21, at 379.

205. Nichols et al., *supra* note 8, at 257.

Hawaiians and Native Americans know how to take care of these remains and objects better than we could. Above all it was difficult for us to let go. We saw the loss of knowledge and history, but not the loss of spiritual balance and wellbeing Hawaiians saw. . . . We are indeed ready to face the present head-on by acknowledging the past in order to clear the way for a bright, productive future.<sup>206</sup>

NAGPRA has laid the groundwork for recognition of, respect for, and preservation of indigenous peoples' cultural property and their continued existence. But law, like people, must be open to new possibilities and innovative thinking to ensure the human rights and cultural survival of all of society's groups.

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206. Elizabeth Tatar, *Introduction* to Implementing the Native American Graves Protection and Repatriation Act, at ix, ix (Roxanna Adams ed., 2001).

## **Appendix 7**

# The Native American Graves Protection and Repatriation Act: Background and Legislative History

Jack F. Trope and Walter R. Echo-Hawk\*

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### I. INTRODUCTION

On November 23, 1990, President George Bush signed into law important human rights legislation: the Native American Graves Protection and Repatriation Act ("NAGPRA").<sup>1</sup> This legislation culminates decades of struggle by Native American tribal governments and people to protect against grave desecration, to repatriate thousands of dead relatives or ancestors, and to retrieve stolen or improperly acquired religious and cultural property back to Native owners.

In many ways, NAGPRA is historic, landmark legislation for Native Americans. It represents fundamental changes in basic social attitudes toward Native peoples by the museum and scientific communities and

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1. 25 U.S.C.A. §§ 3001-3013 (West Supp. 1991) (reprinted in appendix).

the public at large. It and procedures for materials from feder of the massive scope implementation period. This article seeks to by providing attorney background on the the provisions of N.

The Native Amer complex, and some rights, race relations has been written o interests.<sup>3</sup> Admittedly considering these of that the law play a s values and ethics of f

Across the nation, years. Museums and have scientific and e for these important sepulchre of the de protection includes tives—can take for protects the sanctity failed to protect Na laws have indeed f resulting disparate i

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2. Human rights laws long time to implement. Fo implemented today.

3. See, e.g., AMERICA REBURIAL: A RESOURCE GU bibliography for the burgeoning with related policies, regulati

4. General legal article MARCUS PRICE III, DISPUTED (1991); Margaret Bowman, *Resolution of a Conflict, 1 Efforts to Protect Against Laws, 14 N.A.R.F. L. REV. for the Dead: Return of Ind & CONTEMP. L. 195 (1991).*

the public at large. NAGPRA provides nationwide repatriation standards and procedures for the return of Native remains and certain protected materials from federal agencies and federally funded institutions. Because of the massive scope of the repatriation problem, however, a lengthy implementation period can be expected for this human rights legislation.<sup>2</sup> This article seeks to facilitate implementation of the new national policy by providing attorneys, Indian tribes, museums, and scientists with (1) background on the repatriation issue; and (2) an informed analysis of the provisions of NAGPRA and their interaction.

The Native American repatriation topic involves a wide array of complex, and sometimes competing, social interests, including human rights, race relations, religion, science, education, ethics, and law. Much has been written on the topic from the perspective of these social interests.<sup>3</sup> Admittedly, the law has played a relatively minor role in considering these often conflicting interests. It is appropriate, however, that the law play a significant role because it should embody the highest values and ethics of the society that it is intended to serve.<sup>4</sup>

Across the nation, society has vigorously debated these issues in recent years. Museums and scientists have argued that Native human remains have scientific and educational value and, therefore, should be preserved for these important purposes. Tribes have argued that protection of the sepulchre of the dead is an important attribute in our society. This protection includes fundamental legal rights that everyone—except Natives—can take for granted. Unfortunately, the law and policy that protects the sanctity of the dead and the sensibilities of the living has failed to protect Native Americans. This article suggests that American laws have indeed failed to accord Equal Protection. Moreover, the resulting disparate racial treatment has caused painful human rights

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2. Human rights laws that seek to alleviate widespread civil rights violations usually take a long time to implement. For example, the federal civil rights legislation of the 1960s is still being implemented today.

3. See, e.g., AMERICAN INDIAN SACRED OBJECTS', SKELETAL REMAINS', REPATRIATION AND REBURIAL: A RESOURCE GUIDE (Rayna Green & Nancy Marie Mitchell eds., 1990) (providing a bibliography for the burgeoning literature on the subject; it references almost 200 articles together with related policies, regulations, decisions, and laws).

4. General legal articles on repatriation of Native human remains are sparse. See generally H. MARCUS PRICE III, DISPUTING THE DEAD: U.S. LAW ON ABORIGINAL REMAINS AND GRAVE GOODS (1991); Margaret Bowman, *The Reburial of Native American Skeletal Remains: Approaches to the Resolution of a Conflict*, 13 HARV. ENVTL. L. REV. 147 (1989); Walter R. Echo-Hawk, *Tribal Efforts to Protect Against Mistreatment of Indian Dead: The Quest for Equal Protection of the Laws*, 14 N.A.R.F. L. REV. 1 (1988); David J. Harris, Note, *Respect for the Living and Respect for the Dead: Return of Indian and Other Native American Burial Remains*, 39 WASH. U. J. URB. & CONTEMP. L. 195 (1991).

violations in tribal communities. As the repatriation struggle became protracted and reached the federal level, it became a test for our country's commitment to the underlying values of the Bill of Rights and to our American sense of social justice.

Much of the national debate culminated in the passage of NAGPRA—though implementation of that law and its new national policy remain. NAGPRA is a primary subject of this article, which will cover four areas: 1) the historical origins, nature, and scope of the controversy from a Native American perspective; 2) a summary of legal and political rights that are at stake when Indian tribes seek to repatriate their dead relatives; 3) legal and legislative activities in this area of rapid social change; and 4) a description of the background, legislative history, and provisions of NAGPRA.

## II. THE ORIGINS, SCOPE, AND NATURE OF THE REPATRIATION ISSUE

### A. Human Remains and Funerary Objects

In all ages, Mankind has protected the sanctity of the dead. Indeed, respect for the dead is a mark of humanity and is as old as religion itself. British Prime Minister William Ewart Gladstone once wrote:

Show me the manner in which a nation or a community cares for its dead, and I will measure with mathematical exactness the tender sympathies of its people, their respect for the laws of the land, and their loyalty to high ideals.<sup>5</sup>

Like most other nations, respect for the dead is deeply ingrained in American social fabric and jurisprudence. One legal commentator noted:

After a lifetime of investigation of the origin of religious structure, the great Sir James G. Frazier concluded that awe toward the dead was probably the most powerful force in forming primitive systems for grappling with the supernatural.

The sepulture of the dead has, in all ages of the world been regarded as a religious rite. The place where the dead are deposited all civilized nations, and many barbarous ones, regard in some measure at least, as consecrated ground. In the old Saxon tongue the burial ground of the dead was "God's Acre."

[American cases] all agree in principle: The normal treatment of a

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5. Quoted in, Wynne Woolley, *Caring for Old Cemetery Has Been a Lifetime Job*, RICHMOND NEWS LEADER, May 16, 1990, at 1.

corpse, once it is dead, is deeply woven into our culture. It is quick. [No] system of [ ] what are considered worth protecting.

These basic values are reflected in the District of Columbia, by state law, to protect graves from desecration and prohibit grave robbing and removal. Remains are not mistreated or persons—including paupers and unclaimed dead—are entitled to protection.

Disinterment of the dead is prohibited by common law except under the circumstances under close judicial supervision, requirements, which may go to great lengths to protect the dead.

Unfortunately, the above rights, long taken for granted—have failed many people. Massive numbers of graves have been disturbed and carried away, and two million deceased Indians have been buried in graves for storage or display in museums and tourist attractions. Every Indian tribe or Native American group has suffered non-Indian grave looting.

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6. R.F. Martin, Annotation, *Human Remains and Burial Protection* (1950) (citations omitted).

7. See generally Catherine Bell, *Human Remains and Burial Protection* (1950).

8. See, e.g., Hearings on S. 1322, *Human Remains and Burial Protection*, Senate Committee on Indian Affairs, 101st Cong., 2d Sess. (Mar. 1989) (hereinafter *Senate Hearing on S. 1322*).

9. See, e.g., Stastny v. Tachman, 100 Ariz. 111, 417 P.2d 101 (1966).

10. E.g., NEB. REV. STAT. § 71-1001 (1985). Nebraska law provides that a funeral director must bury the dead next of kin; if more than one human body is delivered to him, he must bury them in separate caskets in separate plots in a cemetery, unless the order that must specify the place of interment.

11. See generally PERCIVAL E. COOPER, *Burial Practices and Places* (2d ed. 1950).

12. No accurate national census figures are available. Data are compiled in Harris, *supra* note 6, at 600,000 in U.S. alone), National Cemetery Association, *supra* note 6, at 2 million). NAGPRA requires that remains of Indians who died within five years be returned to their tribes.

25 U.S.C. § 470d-1 (1988).

corpse, once it is decently buried, is to let it lie. This idea is so deeply woven into our legal and cultural fabric that it is commonplace to hear it spoken of as a "right" of the dead and a charge on the quick. [No] system of jurisprudence permits exhumation for less than what are considered weighty, and sometimes compelling reasons.<sup>6</sup>

These basic values are strictly protected in all fifty states, and the District of Columbia, by statutes that comprehensively regulate cemeteries and protect graves from vandalism and desecration.<sup>7</sup> Criminal laws prohibit grave robbing and mutilation of the dead and ensure that human remains are not mistreated. Statutes in most states guarantee that all persons—including paupers, indigents, prisoners, strangers, and other unclaimed dead—are entitled to a decent burial.<sup>8</sup>

Disinterment of the dead is strongly disfavored under American common law except under the most compelling circumstances,<sup>9</sup> and then only under close judicial supervision or under carefully prescribed permit requirements, which may include judicial consent.<sup>10</sup> Common law goes to great lengths to protect the sanctity of the dead.<sup>11</sup>

Unfortunately, the above legal protections—which most citizens take for granted—have failed to protect the graves and the dead of Native people. Massive numbers of Indian dead have been dug up from their graves and carried away. National estimates are that between 100,000 and two million deceased Native people have been dug up from their graves for storage or display by government agencies, museums, universities and tourist attractions.<sup>12</sup> The practice is so widespread that virtually every Indian tribe or Native group in the country has been affected by non-Indian grave looting.

6. R.F. Martin, Annotation, *Corpse Removal and Reinterment*, 21 A.L.R.2d 472, 475-76 (1950) (citations omitted).

7. See generally Catherine Bergin Yalung & Laurel I. Wala, Statutory Survey, *Survey of State Repatriation and Burial Protection Statutes*, 24 ARIZ. ST. L.J. 419 (1992).

8. See, e.g., Hearings on S. 1021 and S. 1980 Before the Senate Select Comm. on Indian Affairs, 101st Cong., 2d Sess. (May 14, 1990) (exhibit 5 to statement of Walter R. Echo-Hawk) [hereinafter *Senate Hearing on S. 1021 & S. 1980*].

9. See, e.g., Stastny v. Tachovsky, 132 N.W.2d 317, 325 (Neb. 1964).

10. E.g., NEB. REV. STAT. § 71-605(5), (6) (1989) (specifying that disinterment may only be done by a licensed funeral director under a permit from the Bureau of Vital Statistics requested by next of kin; if more than one human body is concerned, the applicant must also obtain a court order that must specify the place for reinterment).

11. See generally PERCIVAL E. JACKSON, THE LAW OF CADAVERS AND OF BURIALS AND BURIAL PLACES (2d ed. 1950).

12. No accurate national census of these dead has yet been done. Various estimates, however, are compiled in Harris, *supra* note 4, at 195 n.3, including Haas (100,000-150,000), Moore (300,000-600,000 in U.S. alone), National Congress of American Indians (more than 1.5 million) and Deloria (2 million). NAGPRA requires federal agencies and federally funded museums to inventory these dead within five years. 25 U.S.C.A. § 3003(b)(1)(B).

The dark and troubling circumstances of how these Native dead were obtained has been thoroughly documented by historians. Human remains were obtained by soldiers, government agents, pothunters, private citizens, museum collecting crews, and scientists in the name of profit, entertainment, science, or development.<sup>13</sup>

The problem that the law seeks to remedy is one that has characterized Indian/white relations since the Pilgrims landed at Plymouth Rock in 1620. The first Pilgrim exploring party returned to the Mayflower with corn taken from Indian storage pits and items removed from a grave: "We brought sundry of the prettiest things away with us, and covered up the corpse again."<sup>14</sup>

Early interest in systematically collecting Indian body parts began before the Civil War. Dr. Samuel Morton, the father of American physical anthropology, collected large numbers of Indian crania in the 1840s. His goal was to scientifically prove, through skull measurements, that the American Indian was a racially inferior "savage" who was naturally doomed to extinction.<sup>15</sup> Morton's findings established the "Vanishing Red Man" theory, which was embraced by government policy-makers as "scientific justification" for relocating Indian tribes, taking tribal land, and conducting genocide—in certain instances—against American Indians.<sup>16</sup>

Later, the search for Indian body parts became official federal policy with the Surgeon General's Order of 1868. The policy directed army personnel to procure Indian crania and other body parts for the Army Medical Museum.<sup>17</sup> In ensuing decades, over 4000 heads were taken from battlefields, burial grounds, POW camps, hospitals, fresh graves, and burial scaffolds across the country. Government headhunters decapitated

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13. One historical study in particular was made widely available to Congress to provide a historical backdrop for NAGPRA: ROBERT E. BIEDER, A BRIEF HISTORICAL SURVEY OF THE EXPROPRIATION OF AMERICAN INDIAN REMAINS (1990) [hereinafter BIEDER REPORT], reprinted in *Senate Hearing on S. 1021 & S. 1980, supra* note 8, at 278-363; see also ROBERT E. BIEDER, SCIENCE ENCOUNTERS THE INDIAN, 1820-1880 (1986); DOUGLAS COLE, CAPTURED HERITAGE: THE SCRAMBLE FOR NORTHWEST COAST ARTIFACTS (1985); STEPHEN JAY GOULD, THE MISMEASURE OF MAN (1981); ORLAN J. SVINGEN, HISTORY OF THE EXPROPRIATION OF PAWNEE INDIAN GRAVES IN THE CONTROL OF THE NEBRASKA STATE HISTORICAL SOCIETY (1989); JAMES T. RIDING IN, REPORT VERIFYING THE IDENTITY OF SIX PAWNEE SCOUT CRANIA AT THE SMITHSONIAN AND THE NATIONAL MUSEUM OF HEALTH AND MEDICINE (1990), reprinted in *Senate Hearing on S. 1021 & S. 1980, supra* note 8, at 211-29.

14. DWIGHT B. HEATH, MOUNT'S RELATION: A JOURNAL OF THE PILGRIMS AT PLYMOUTH 27-28 (1986).

15. BIEDER, *supra* note 13, at 55-103.

16. *Id.*; see also RUSSEL THORNTON, AMERICAN INDIAN HOLOCAUST AND SURVIVAL (1987).

17. The Surgeon General's Order is reproduced in full in BIEDER REPORT, *supra* note 13, at 36-37.

Natives who had never a western Kansas bat Colorado's Sand Creek were hanged and then 1892 account of rainy graves is chilling:

I collected them in plain sight of many had to visit the coun . . . after securing stockade gate which for fear of detection . . .

On one occasion I bend my movement place intended and rain, snow or wind or coming, by either always seen but of the greatest fear I see my tracks & a maxillae are not on all detached save one woman, with the i The bones of them ornaments make the

During this period, museums engaged in c As Franz Boas, the f 1880s, "it is most unph is the use, someone h used by museum colle better be described, in tions."<sup>23</sup> Some museum skeletons. New York's

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18. RIDING IN, *supra* note 13.

19. See Entries in accession A.M.M. nos. 8-12 from W.H. 20, 1867.

20. BIEDER, *supra* note 13.

21. BIEDER REPORT, *supra* note 13.

22. *Id.* at 30.

23. COLE, *supra* note 13,

Natives who had never been buried, such as slain Pawnee warriors from a western Kansas battleground,<sup>18</sup> Cheyenne and Arapaho victims of Colorado's Sand Creek Massacre,<sup>19</sup> and defeated Modoc leaders who were hanged and then shipped to the Army Medical Museum.<sup>20</sup> One 1892 account of rainy night grave robbing of fifteen Blackfeet Indian graves is chilling:

I collected them in a way somewhat unusual: the burial place is in plain sight of many Indian houses and very near frequent roads. I had to visit the country at night when not even the dogs were stirring . . . after securing one [skull] I had to pass the Indian sentry at the stockade gate which I never attempted with more than one [skull], for fear of detection.

On one occasion I was followed by an Indian who did not comprehend my movements, and I made a circuitous route away from the place intended and threw him off his suspicions. On stormy nights—rain, snow or wind & bitter cold, I think I was never observed going or coming, by either Indians or dogs, but on pleasant nights—I was always seen but of course no one knew what I had in my coat . . . the greatest fear I had was that some Indian would miss the heads, see my tracks & ambush me, but they didn't. I regret the lower maxillae are not on each skull, I got all I could find, and they are all detached save one. There is in the box a left radius & ulna of a woman, with the identical bracelets on that were buried with her. The bones of themselves are nothing, but the combination with the ornaments make them a little noticeable.<sup>21</sup>

During this period, collecting crews from America's newly founded museums engaged in competitive expeditions to obtain Indian skeletons. As Franz Boas, the famous American anthropologist, observed in the 1880s, "it is most unpleasant work to steal bones from graves, but what is the use, someone has to do it."<sup>22</sup> Scientific means were not always used by museum collecting expeditions during this period, which can better be described, in some instances, as "fervid rip-and-run operations."<sup>23</sup> Some museums employed outright deception in order to obtain skeletons. New York's American Museum of Natural History, for ex-

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18. RIDING IN, *supra* note 13, at 223.

19. See Entries in accession records for the Army Medical Museum, Anatomical Section: A.M.M. nos. 8-12 from W.H. Forwood, Assistant Surgeon, U.S. Army, Ft. Riley, Kansas, Jan. 20, 1867.

20. BIEDER, *supra* note 13, at 325.

21. BIEDER REPORT, *supra* note 13, at 45-46.

22. *Id.* at 30.

23. COLE, *supra* note 13, at 175.

ample, literally staged a fake funeral for a deceased Eskimo to prevent his son from discovering that the museum had stolen the remains.<sup>24</sup> In 1990, one Sioux leader decried these museum activities in testimony before the United States Senate:

[T]his [Bieder Report] is a very difficult report for an Indian to read. Earlier I talked about meeting with many of the traditional people. They constantly tell us that the white man won't believe you unless it's written in black and white. It's got to be written in black and white . . . So today we have something written in black and white. It's a very sad account of the atrocities. It's a shameful account of how museums—some of the museums that were here today actually competed with each other and hired people to rob graves of Native American people.<sup>25</sup>

At the turn of the century, Congress continued its deplorable federal policy with the passage of the Antiquities Act of 1906.<sup>26</sup> That Act, which was intended to protect "archaeological resources" located on federal lands from looters, defined dead Indians interred on federal lands as "archaeological resources" and, contrary to long standing common-law principles, converted these dead persons into "federal property."<sup>27</sup> The Antiquities Act allowed these dead persons to be dug up pursuant to a federal permit "for the permanent preservation [of the remains] in public museums."<sup>28</sup> Since then, thousands of Indian dead have been classified as "archaeological resources" and exhumed as "federal property."<sup>29</sup>

24. KENN HARPER, GIVE ME MY FATHER'S BODY: THE LIFE OF MINIK, THE NEW YORK ESKIMO 89-95 (1986).

25. *Senate Hearing on S. 1021 & 1980*, *supra* note 8, at 76 (statement of Jerry Flute).

26. 16 U.S.C. §§ 431-433 (1988).

27. American common law has always held that a dead body is not "property." See, e.g., 88-73 Kan. Op. Att'y Gen. (1988); JACKSON, *supra* note 11, at 129-31, 133-34; 22A AM. JUR. 2d *Dead Bodies* § 2; 25A C.J.S. *Dead Bodies* § 2; R.F. Martin, Annotation, *Corpse—Removal and Reinterment*, 21 A.L.R.2d 472, 480, 486 (1950).

28. 16 U.S.C. § 432 (1988); see also Archaeological Resources Protection Act, 16 U.S.C. § 470bb(1), 470(b)(3) (1988).

29. Preliminary figures of a few federal agencies supplied to the Native American Rights Fund in 1990 show almost 14,500 deceased Natives in their possession:

National Park Service.....	3500 Dead Bodies
Tennessee Valley Authority.....	10,000 Dead Bodies
Bureau of Land Management .....	109 Dead Bodies
Fish and Wildlife Service .....	637 Dead Bodies
Air Force .....	146 + Dead Bodies
Navy .....	85 + Dead Bodies

(Survey responses in possession of the Native American Rights Fund)

In summary, American dead differently than the dead of other cultures. Dead Indians were commonplace for public archaeologists to study, for scientific specimens, or library books, but there were few examples of mistreatment of dead Indians in recent years under this rubric. Social ethics have changed, however, and the Equal Protection problem remains.

### B. Sacred Dead

One pattern that defines the treatment of Indian dead is the one-way transfer of Indian dead to white hands. By the 1870s, after most of the major battles of the Government's acquisition of Indian lands had been accomplished. Thereafter, the transfer of Indian dead and continued until most Indian dead had been transferred to white hands. This transfer included some stolen or illegal removals of cultural patrimony. Native Americans lost their right to their dead, as it turned up in museums or in private collections, securing its return.<sup>30</sup>

One historian commented on the transfer of Indian dead that occurred in a short, fateful period of time:

During the half-century between 1870 and 1920, the removal of Indian material, both secular and spiritual, from the hands of the Indians and into the hands of private and public collectors . . . was pursued sometimes with great energy and often with avarice. By 1920, the removal of Indian material in Milwaukee and Cambridge was more complete than in Concord.

30. For example, American Indians were forced to give up their dead to white collectors. One such collector, George Custer, reportedly took five years to negotiate the return of the remains of the Lakota who had been killed at the Battle of Little Big Horn. See Custer v. Onondaga Co. 1899 (failed jurisdiction). Thomas Sobol, Commissioner of Education, "The Return of the Belts to the Onondaga Nation (under

In summary, American social policy has historically treated Indian dead differently than the dead of other races. Unfortunately, it has been commonplace for public agencies to treat Native American dead as *archaeological resources, property, pathological material, data, specimens, or library books*, but not as *human beings*. Many contemporary examples of mistreatment of Native graves and dead bodies occurred in recent years under this rubric, which shocked the Nation's conscience as social ethics have changed and society has become more sensitive to this Equal Protection problem.

#### B. Sacred Objects and Cultural Patrimony

One pattern that defines Indian-white relations in the United States is the one-way transfer of Indian property to non-Indian ownership. By the 1870s, after most tribes were placed on small reservations, the Government's acquisition of Indian lands had in large part been accomplished. Thereafter, the pattern shifted from real estate to personality and continued until most of the material culture of Native people had been transferred to white hands. That massive property transfer invariably included some stolen or improperly acquired Native sacred objects and cultural patrimony. Native owners who sought the return of their property, as it turned up in museums, experienced inordinate difficulty in securing its return.<sup>30</sup>

One historian commented on the enormous transfer of cultural property that occurred in a short, fifty-year period:

During the half-century or so after 1875, a staggering quantity of material, both secular and sacred—from spindle whorls to soul-catchers—left the hands of their native creators and users for the private and public collections of the European world. The scramble . . . was pursued sometimes with respect, occasionally with rapacity, often with avarice. By the time it ended there was more Kwakiutl material in Milwaukee than in Mamalilikulla, more Salish pieces in Cambridge than in Comox. The City of Washington contained more

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30. For example, American property-law principles provide that no one may assert a claim to stolen or wrongfully acquired property; nonetheless, it took the Six Nations Confederacy seventy-five years to negotiate the return of its wampum belts, which are important communally owned patrimony of the Confederacy. See *Onondaga Nation v. Thatcher*, 61 N.Y.S. 1027, 1028, 1032 (Sup. Ct. Onondaga Co. 1899) (failed judicial attempt to repatriate belts); see also Memorandum from Thomas Sobol, Commissioner of Education, State of New York, *Proposed Return of 12 Wampum Belts to the Onondaga Nation* (undated) (on file with author).

Northwest Coast material than the state of Washington and New York City probably housed more British Columbia material than British Columbia itself.

In retrospect it is clear that the goods flowed irrevocably from Native hands to Euro-American ones until little was left in possession of the people who had invented, made, and used them.<sup>31</sup>

Though some of that property transfer was through legitimate trade and intercourse, a significant amount of Native property was acquired through illegitimate means. This problem was brought to the attention of Congress by the Carter Administration in 1979 following a one-year study mandated by the American Indian Religious Freedom Act,<sup>32</sup> as follows:

Museum records show that some sacred objects were sold by their original Native owner or owners. In many instances, however, the chain of title does not lead to the original owners. Some religious property left the original ownership during military confrontations, was included in the spoils of war and eventually fell to the control of museums. Also in times past, sacred objects were lost by Native owners as a result of less violent pressures exerted by federally-sponsored missionaries and Indian agents.

Most sacred objects were stolen from their original owners. In other cases, religious property was converted and sold by Native people who did not have ownership or title to the sacred object.

Today in many parts of the country, it is common for "pothunters" to enter Indian and public lands for the purpose of illegally expropriating sacred objects. Interstate trafficking in and exporting of such property flourishes, with some of these sacred objects eventually entering into the possession of museums.<sup>33</sup>

The adverse impacts that a refusal to return stolen or improperly acquired sacred material has upon First Amendment rights of tribal religious practitioners,<sup>34</sup> and upon basic property rights,<sup>35</sup> has been noted

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31. COLE, *supra* note 13, at 286-310.

32. ("AIRFA"), 42 U.S.C. § 1996 (1988).

33. SECRETARY OF THE INTERIOR FED. AGENCIES TASK FORCE, AM. INDIAN RELIGIOUS FREEDOM ACT REP. 77, Aug. 1979. The report to Congress was required by § 2 of the American Indian Religious Freedom Act. 42 U.S.C. § 1996.

34. See, e.g., THE CONCEPT OF SACRED MATERIALS AND THEIR PLACE IN THE WORLD (George P. Horse Capture ed., 1989); Bowen Blair, *American Indians v. American Museums, A Matter of Religious Freedom*, 5 AM. INDIAN L. REV. 13 (1979); Bruce Davis, *Indian Religious Artifacts: The Curator's Moral Dilemma*, 2 INDIAN L. SUPP. CTR. REP. 1 (1980); Bowen Blair, Note, *Indian*

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### III. LI

#### A. The Failure o

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Rights: Native Americans v. 125 (1979).

35. See, e.g., Walter R. Competing Legal Interests (1986).

36. See *infra* text acco

37. See, e.g., Ney v. Y

38. PRICE, *supra* note

by scholars and commentators. This issue has increasingly become of great concern among tribes and traditional religious practitioners. NAGPRA establishes a national standard and procedure for the return of this property to Native owners.<sup>36</sup>

### III. LEGAL RIGHTS TO REPATRIATE THE DEAD

#### A. *The Failure of the Legal System to Protect Native Burial Sites*

##### 1. Common Law

The legal system also contributed to the disparate treatment of Native American human remains and funerary objects by failing to incorporate indigenous needs and values into the common law as it developed in the United States. The jurisprudence that protects the sanctity of the dead and the sensibilities of the living is the common law, which we inherited from England. Common law is judge-made law that is supposed to safeguard considerations of justice and equity; it evolves and changes over time to meet society's changing needs.<sup>37</sup> Unfortunately, during its development in this country, the common law failed to take into account unique indigenous burial practices and mortuary traditions. As explained by one legal scholar:

At a sensitive point in time when American courts were developing a foundation of experience-based common law and legislators were enacting specific statutes for cemeteries and burials reflecting the American condition and requirements, the courts and law makers were deprived of the benefit of consideration of practical issues of appropriate disposition of prehistorical aboriginal remains and grave goods and the property rights of Indians to these items. Thus, when issues later surfaced in the courts, the judicial system was forced to attempt to apply an established body of statutes and experience-based common law to situations that law had not previously considered and with which it was ill suited to deal.<sup>38</sup>

The lack of access to courts by Native Americans during this formative period is understandable. Disputes between Native people and American citizens were usually settled on the battlefield, instead of in courtrooms.

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*Rights: Native Americans versus American Museums—A Battle for Artifacts*, 7 AM. INDIAN L. REV. 125 (1979).

35. See, e.g., Walter R. Echo-Hawk, *Museum Rights vs. Indian Rights: Guidelines for Assessing Competing Legal Interests in Native Cultural Resources*, 14 N.Y.U. REV. L. & SOC. CHANGE 437 (1986).

36. See *infra* text accompanying notes 165-94.

37. See, e.g., *Ney v. Yellow Cab Co.*, 117 N.E.2d 74, 79 (Ill. 1954).

38. PRICE, *supra* note 4, at 22.

Furthermore, in light of prevailing racial views of the time, Indians had little realistic hope of a fair hearing in American courts. Just as racial oppression against African Americans was justified by United States Supreme Court decisions such as *Plessy v. Ferguson*,<sup>39</sup> similar decisions branded Indian Nations as ignorant and uncivilized.<sup>40</sup> Supreme Court decisions characterized Indians "as an inferior race of people, without privileges of citizens."<sup>41</sup> It was not until 1879 that a federal court ruled that an Indian was a "person" within the meaning of federal law.<sup>42</sup> Moreover, Indians were not granted citizenship until 1924.<sup>43</sup>

Hence, American legal protections for the dead did not take into account unique Native mortuary practices such as scaffold, canoe, or tree burials.<sup>44</sup> The law did not protect unmarked Native graves like it protected marked European graves. Nor did the law recognize that Native people maintain close religious connections with ancient dead; instead, the right to protect the dead was limited to the decedent's immediate next of kin. The law also failed to take into account relevant historical circumstances such as government removal of tribes away from their burial grounds, and the need to accord legal protection for the graves and cemeteries that were involuntarily left behind.

Native people were faced with highly ethnocentric decisions in some common-law cases. For example, in *Wana the Bear v. Community Construction, Inc.*,<sup>45</sup> the court held that a historic Indian cemetery was not a "cemetery" within the meaning of state cemetery-protection laws.<sup>46</sup> In *State v. Glass*,<sup>47</sup> the court held that older human skeletal remains are not considered "human" for purposes of an Ohio grave-robbing statute, which leaves only aboriginal remains in an unprotected status in that

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39. 163 U.S. 537 (1896).

40. Montoya v. United States, 180 U.S. 261, 265 (1901).

41. Johnson v. McIntosh, 21 U.S. (8 Wheat.) 543, 569-70 (1823) (the "Marshall trilogy" of cases stripped Indian Nations of their sovereignty and land rights, and converted them into "domestic dependent nations" in a state of "pupilage" to the United States); see also Worcester v. Georgia, 21 U.S. (6 Pet.) 515 (1832); Cherokee Nation v. Georgia, 30 U.S. (5 Pet.) 1 (1831). Unlike *Plessy*, which was so devastating to African Americans, these Indian cases have never been overturned by the Supreme Court.

42. United States ex rel. Standing Bear v. Crook, 25 F. Cas. 695 (C.C.D. Neb. 1879) (No. 14,891).

43. Citizenship Act of 1924, 8 U.S.C. § 1401(b) (1988).

44. See generally H.C. YARROW, NORTH AMERICAN INDIAN BURIAL CUSTOMS (1988); David Bushnell, *Burial of the Alqonoquian, Siouan, and Caddoan Tribes West of the Mississippi*, 83 BUREAU OF AM. ETHNOLOGY BULL. (1927).

45. 180 Cal. Rptr. 423 (Ct. App. 1982).

46. Id. at 425-27.

47. 273 N.E.2d 893 (Ohio Ct. App. 1971).

state.<sup>48</sup> The decision in may be considered "a The abandonment do communities that volu highly ethnocentric wh

## 2. State Statutory Law

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### B. Legal Theories

Despite the failure of graves in the past, a provides a strong legal efforts. In addition to can provide the under repatriation claims: 1) of the Fifth and Four the sovereign right o domestic affairs; and 5

#### 1. Common Law

If applied equally, Native Americans. Although dead is voluminous a myths and legal fiction

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48. Id. at 896-98.

49. 52 N.E. 126 (Ohio 1891).

50. Id. at 127.

51. See generally Yalung &

52. Hugh Dellios, *Town of 1991*, at 1.

state.<sup>48</sup> The decision in *Carter v. City of Zanesville*<sup>49</sup> held that a cemetery may be considered "abandoned" if no further interments are done.<sup>50</sup> The abandonment doctrine might make sense if applied to European communities that voluntarily abandon local cemeteries, but it becomes highly ethnocentric when applied to cemeteries of relocated Indian tribes.

## 2. State Statutory Law

Loopholes in state statutory law, which universally supplement common law protections, contributed to the failure to protect Native graves.<sup>51</sup> State grave and cemetery protection statutes typically regulated and protected marked graves, but not unmarked graves. Because in many instances Indian graves are unmarked, they received no statutory protection. As such, many unmarked Indian graves were discovered, disturbed, or dug up through construction, natural causes, or pothunting—and the remains were never reburied. For example, Illinois, despite comprehensive grave-protection laws, allowed an entire Indian cemetery containing 234 men, women, and children to be uncovered for public display at the Dixon Mounds Museum.<sup>52</sup>

### B. Legal Theories Supporting Protection and Repatriation of Native Dead

Despite the failure of law and social policy to protect Native American graves in the past, a proper non-discriminatory application of the law provides a strong legal basis for tribal grave protection and repatriation efforts. In addition to new statutory rights, five sources of law exist that can provide the underpinning for tribal grave protection efforts and repatriation claims: 1) the common law; 2) the Equal Protection clauses of the Fifth and Fourteenth Amendments; 3) the First Amendment; 4) the sovereign right of Indian tribal governments to govern internal domestic affairs; and 5) Indian treaties.

#### 1. Common Law

If applied equally, common law offers a variety of protections for Native Americans. Although the area of common law that protects the dead is voluminous and sometimes obscure, it dispels many popular myths and legal fictions that have been injurious to Native Americans.

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48. *Id.* at 896-98.

49. 52 N.E. 126 (Ohio 1898).

50. *Id.* at 127.

51. See generally Yalung & Wala, *supra* note 7.

52. Hugh Dellios, *Town Fears Burial Mounds May Never Be The Same*, CHI. TRIB., Oct. 13, 1991, at 1.

First, no "property interest" exists in a dead body in the eyes of the common law.<sup>53</sup> This rule makes it impossible to own the remains of a Native American; the dead of any race are simply not chattels to be bought or sold in the marketplace.

Second, the popular fiction that a landowner may own and sell the contents of Indian graves located on his land is legally erroneous. A landowner only has *technical possession* of graves located on his land and is required to hold them *in trust* for the relatives of the deceased.<sup>54</sup> Therefore, no institution may have title to dead Indians obtained from landowners because landowners have no title to convey.<sup>55</sup>

Another harmful myth that is popular among pothunters and private collectors is that objects *found* in Indian graves belong to the finder under a *finders keepers, losers weepers* rule. This myth runs afoul of the rule that personal possessions interred with the dead<sup>56</sup> are not abandoned property. To the contrary, whenever funerary objects are removed from graves, they belong to the person who furnished the grave or to his known descendants.<sup>57</sup> Thus, the title that pot hunters and collectors have to objects that were removed from Indian graves may be invalid under the common law.

In summary, common law protections should apply to Indian graves and Indian dead with the same force that the courts have applied them to the dead of other races. In fact, some courts have applied the common law to protect Indian dead.<sup>58</sup>

## 2. Equal Protection

Disparate racial treatment in matters affecting Indian dead may run afoul of the Equal Protection Clauses of the Fifth and Fourteenth Amendments.<sup>59</sup> An Equal Protection claim may arise if government

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53. See *supra* note 28; see also *Charrier v. Bell*, 496 So. 2d 601, 607 (La. Ct. App.), cert. denied, 498 So. 2d 753 (La. 1986) (funerary objects from 200-year-old Indian graves belong to descendent Indian tribe).

54. See, e.g., *Busler v. State*, 184 S.W.2d 24, 27 (Tenn. 1944).

55. See *id.*

56. These grave objects are defined as "funerary objects" in NAGPRA. 25 U.S.C.A. § 3001(3)(A), (B).

57. See, e.g., *Maddox v. State*, 121 S.E. 251 (Ga. Ct. App. 1924); *Ware v. State*, 121 S.E. 251 (Ga. Ct. App. 1924); *Ternant v. Boudreau*, 6 Rob. 488 (La. 1844); *Charrier*, 496 So. 2d at 607; *State v. Doepke*, 68 Mo. 208 (1878); *Busler v. State*, 184 S.W.2d 24 (Tenn. 1944).

58. See, e.g., *United States v. Unknown Heirs*, 152 F. Supp. 452 (W.D. Okla. 1957); *Charrier*, 496 So. 2d at 607; *Matter of Indian Cemetery*, Queens County, N.Y., 169 Misc. 584 (N.Y. Sup. Ct. 1938).

59. *Rice v. Sioux City Cemetery*, 349 U.S. 70, 80 (1955) (Black, J., dissenting) (a discrimination claim by next of kin to a deceased Winnebago Indian who was refused burial in an all white cemetery was moot by the time it reached the Supreme Court).

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## 3. First Amendment

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60. VIRGINIA ARMSTRONG, I H

61. See, e.g., Hearing on S.  
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agencies treat Indian graves or remains differently than the dead of other races. Laws and policies that treat Indian dead as *archaeological resources, property, or historic property* are suspect when compared to laws that ordinarily protect the dead of other races. Overt discrimination, such as the 1868 Surgeon General's Order, could not pass muster today under the Equal Protection Clause.

### 3. First Amendment

First Amendment Free Exercise rights are implicated if the government withholds Indian dead from next of kin or tribes of origin. Mankind has always buried the dead with religion, and Native Americans are no different. Therefore, it is not surprising that Native religious beliefs and practices may be infringed upon when tribal dead are desecrated, disturbed, or withheld from burial by the government. In 1855, Chief Seattle told United States treaty negotiators, "To us the ashes of our ancestors are sacred and their resting place is hallowed ground."<sup>60</sup>

Indeed, Indian Tribes, Native Alaskans, and Native Hawaiians commonly believe that if the dead are disturbed or robbed, the spirit is disturbed and wanders—a spiritual trauma for the deceased that can also bring ill upon the living.<sup>61</sup> The adverse impacts of such interference on tribal religion was described by the Carter Administration to Congress in 1979 as follows:

Native American religions, along with most other religions, provide standards for the care and treatment of cemeteries and human remains. Tribal customary laws generally include standards of conduct for the care and treatment of all cemeteries encountered and human remains uncovered, as well as for the burial sites and bodies of their own ancestors. Grounded in Native American religious beliefs, these laws may, for example, require the performance of certain types of rituals at the burial site, specify who may visit the site or prescribe the proper disposition of burial offerings.

The prevalent view in the society of applicable disciplines is that Native American remains are public property and artifacts for study, display, and cultural investment. It is understandable that this view is in conflict with and repugnant to those Native people whose ancestors and near relatives are considered the property at issue.

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60. VIRGINIA ARMSTRONG, I HAVE SPOKEN 78 (1971).

61. See, e.g., Hearing on S. 187 Before the Senate Select Comm. on Indian Affairs on Native American Museum Claims Commission Act, 100th Cong., 2d Sess., 282-307 (1988) [hereinafter Senate Hearing on S. 187] (testimony of Roger Echo-Hawk on Pawnee Mortuary Traditions).

Most Native American religious beliefs dictate that burial sites once completed are not to be disturbed or displaced, except by natural occurrence.<sup>62</sup>

State interference with religious-based mortuary beliefs and practices has given rise to a Free Exercise cause of action when other citizens are concerned.<sup>63</sup> The continuing strength of First Amendment protection, however, must be reassessed in light of a recent United States Supreme Court decision. In *Employment Division of Oregon v. Smith*,<sup>64</sup> the Supreme Court seriously weakened religious liberty for all citizens.<sup>65</sup>

#### 4. Sovereign Rights

Political rights of Indian Nations as sovereigns can provide another legal basis to repatriate dead tribal members and ancestors. One basic attribute of tribal sovereignty that has been repeatedly recognized by the Supreme Court is the right of Indian tribes to govern domestic internal affairs of their members.<sup>66</sup> In *United States v. Quiver*,<sup>67</sup> the Court said that "the relations of the Indians among themselves—the conduct of one toward another—is to be controlled by the customs and laws of the tribe, save when Congress expressly or clearly directs otherwise."<sup>68</sup>

One internal domestic matter that falls squarely within this zone of tribal sovereignty is the relationship between the living and the dead. Therefore, domestic relationships involving the dead may not be interfered with by federal or state government except "when Congress ex-

pressly or clearly directs or court applied these principles that provided for the disposal within state jurisdiction, etc. Thus, Indian tribal governments may act to repatriate tribal acts for its citizenry to repatriate.

#### 5. Treaties

Indian treaty rights may repatriate members or ancestors ceded by treaty.<sup>72</sup> A treaty is a grant of rights from the United States to a tribe. Simply stated, if a treaty does not take away tribal powers or rights, it does not affect them. To the contrary, "when a tribe retains all rights not taken away by the treaty so long as the right remains in the tribe's sovereign dependent status."

Therefore, no treaty expressly or clearly directs or clearly disturb Indian graves, expressly or clearly divest a tribe of its pre-existing rights, or expressly or clearly remove from lands ceded to the tribe by the signatory tribe implicitly or clearly or clearly and rebury the remains.

An implied treaty right based on Indian treaty construction arises when the relevant canons require a court to interpret Indians, given their practices and traditions.

62. American Indian Religious Freedom Act Report 64, *supra* note 33.

63. See, e.g., *Fuller v. Marx*, 724 F.2d 717 (8th Cir. 1984).

64. 494 U.S. 872 (1990).

65. *Id.* at 883-88; see also *Intercommunity Ctr. for Justice and Peace v. I.N.S.*, 910 F.2d 42 (2d Cir. 1990); *Salaam v. Lockhart*, 905 F.2d 1168 (8th Cir. 1990); *Salvation Army v. New Jersey Dep't of Community Affairs*, 919 F.2d 183 (3rd Cir. 1990); *South Ridge Baptist Church v. Industrial Comm'n of Ohio*, 911 F.2d 1203 (6th Cir. 1990); *Cornerstone Bible Church v. City of Hastings*, 740 F. Supp. 654 (D. Mich. 1990); *Montgomery v. County of Clinton*, 743 F. Supp. 1253 (W.D. Mich. 1990); *Yang v. Sturmer*, 750 F. Supp. 558 (D.R.I. 1990). A full discussion of the impact of the *Smith* decision is beyond the scope of this article.

66. See *United States v. Kagama*, 118 U.S. 375, 383-84 (1883); *Ex Parte Crow Dog*, 109 U.S. 556, 570 (1881). Indian Tribes have an inherent sovereign right to regulate internal social relations. See, e.g., *United States v. Antelope*, 430 U.S. 641, 645 (1977); *United States v. Mazurie*, 419 U.S. 544, 557 (1975); *McClanahan v. Arizona Tax Comm'n*, 411 U.S. 164, 173 (1973). Tribes have exercised this authority in a variety of contexts. See, e.g., *United States v. Wheeler*, 435 U.S. 313 (1978) (criminal jurisdiction to punish members for illegal activity); *Fisher v. District Court*, 424 U.S. 382 (1976) (divorce and child custody matters); *Jones v. Meehan*, 175 U.S. 1 (1899) (inheritance); *Johnson v. Chilkat Indian Village*, 457 F. Supp. 384, 388-89 (D. Alaska 1978) (regulating property rights); *Wear v. Sanger*, 2 S.W. 307 (Mo. 1886) (regulating property rights).

67. 241 U.S. 602 (1916).

68. *Id.* at 605-06.

69. *Id.*

70. 370 N.W.2d 737 (S.D. 1985).

71. *Id.* at 740-42.

72. See *Echo-Hawk*, *supra* note 4, at 103.

73. *United States v. Winans*, 198 U.S. 364 (1905).

74. *Babbitt Ford, Inc. v. Navajo Indians*, 926 (1983).

75. *United States v. Adair*, 723 F.2d 208 (1983); *v. Klamath Tribe*, 473 U.S. 753, 764-74 (1978); *United States v. Ahtanum*, 420 U.S. 926 (1983).

76. FELIX COHEN'S HANDBOOK OF UNITED STATES LAW, 2d ed., 1982) [hereinafter COHEN].

pressly or clearly directs otherwise.”<sup>69</sup> In *Mexican v. Circle Bear*,<sup>70</sup> the court applied these principles and granted comity to a tribal court order that provided for the disposal of the body of an Indian who had died within state jurisdiction, even though tribal and state law differed.<sup>71</sup> Thus, Indian tribal governments, acting in their *in parens patriae* capacity, may act to repatriate tribal dead in the same way that the United States acts for its citizenry to repatriate MIA’s from Southeast Asia.

### 5. Treaties

Indian treaty rights may also provide a legal theory for tribes to repatriate members or ancestors who have been exhumed from lands ceded by treaty.<sup>72</sup> A treaty is “not a grant of rights to the Indians, but a grant of rights from them—a reservation of those not granted.”<sup>73</sup> Simply stated, if a treaty does not expressly delineate the reserved tribal powers or rights, it does not mean that they have been divested.<sup>74</sup> To the contrary, “when a tribe and the Government negotiate a treaty, the tribe retains all rights not expressly ceded to the Government in the treaty so long as the rights retained are consistent with the tribe’s sovereign dependent status.”<sup>75</sup>

Therefore, no treaty expressly granted the United States a right to disturb Indian graves, expropriate Indian dead from ceded lands, or divest a tribe of its pre-existing power to protect those dead.<sup>76</sup> If burials are removed from lands ceded by treaty, a strong argument exists that the signatory tribe implicitly retained or reserved the right to repatriate and rebury the remains.

An implied treaty right becomes apparent when applicable canons of Indian treaty construction are applied to most land cession treaties. The canons require a court to interpret the treaties as understood by the Indians, given their practices and customs as of the date that the treaty

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69. *Id.*

70. 370 N.W.2d 737 (S.D. 1985).

71. *Id.* at 740-42.

72. See Echo-Hawk, *supra* note 4, at 4.

73. *United States v. Winans*, 198 U.S. 371, 381 (1905).

74. *Babbitt Ford, Inc. v. Navajo Indian Tribe*, 710 F.2d 587 (9th Cir.), *cert. denied*, 466 U.S. 926 (1983).

75. *United States v. Adair*, 723 F.2d 1394, 1413 (9th Cir. 1984); *see also Oregon Wildlife Dep’t v. Klamath Tribe*, 473 U.S. 753, 764-74 (1985); *Oliphant v. Suquamish Indian Tribe*, 435 U.S. 191, 208 (1978); *United States v. Ahtanum Irrigation Dist.*, 236 F.2d 321, 326 (9th Cir. 1956), *cert. denied*, 352 U.S. 988 (1957).

76. FELIX COHEN’S HANDBOOK OF FEDERAL INDIAN LAW 485-608 (Rennard Strickland et al. eds., 1982) [hereinafter COHEN].

was consummated.<sup>77</sup> Thus, even though treaties ceded tribal lands to the United States, it cannot be implied that signatory tribes also relinquished their right to protect tribal dead buried in the ceded lands. Grave robbing was abhorrent to tribal religion.<sup>78</sup> Therefore, the intent to allow desecration cannot fairly be imputed to the Chiefs who signed the treaties.

Similarly, it cannot be presumed that the United States intended to obtain Indian lands in order to desecrate Indian graves and obtain dead bodies—at least not until the 1868 Surgeon General's Order. This type of activity was a common-law felony, and the canons of treaty construction preclude imputing an illegal intent to the United States as the fiduciary for Indian tribes.

Although a bundle of legal rights is clearly secured to Indian tribes by the Bill of Rights, treaties, common law, and Federal Indian law, the court system is too costly, time consuming, uncertain, and erratic to adequately redress massive repatriation problems. This is especially true for small, impoverished tribes faced with the problem of having to repatriate large numbers of tribal dead from many different states. Instead, remedial human rights legislation is the superior alternative.

#### IV. PRE-NAGPRA LEGISLATION

##### A. State Legislation

There are two types of relevant state legislation: (1) protection for unmarked graves; and (2) actual repatriation legislation.

###### 1. Protection for Unmarked Graves

Thirty-four states have passed unmarked burial-protection laws in recent years, and there is a definite national trend towards the passage of such legislation.<sup>79</sup> These laws typically prohibit intentional disturbance of unmarked graves, provide guidelines to protect the graves, and mandate disposition of human remains from the graves in a way that guarantees reburial after a study period. The constitutionality of these

77. See, e.g., *Washington v. State Commercial Fishing Vessel Ass'n*, 443 U.S. 658, 675-76 (1979); *Choctaw Nation v. Oklahoma*, 397 U.S. 620, 631 (1970); *United States v. Winans*, 198 U.S. 371, 381 (1905); *Worcester v. Georgia*, 31 U.S. (6 Pet.) 515, 551-54 (1832); *United States v. Adair*, 723 F.2d 1394, 1412-13 (9th Cir. 1984); *United States v. Top Sky*, 547 F.2d 486, 487 (9th Cir. 1976).

78. See, e.g., *Senate Hearing on S. 187*, *supra* note 61.

79. These states are: Arizona, Arkansas, Montana, Kansas, Nebraska, Oklahoma, North Dakota, South Dakota, Iowa, Missouri, Minnesota, Colorado, Idaho, New Mexico, New Hampshire, North Carolina, Oregon, Washington, Florida, California, Maine, Massachusetts, West Virginia, Tennessee, Alaska, Delaware, Nevada, Connecticut, Hawaii, Wisconsin, Illinois, Indiana, Mississippi, and Virginia. These laws are summarized in Harris, *supra* note 4.

laws has been uniformly upheld. *Horn*,<sup>80</sup> *Thompson v. City of Burns-Paiute Tribe v. Castoe*<sup>81</sup>

##### 2. Repatriation Legislation

Five states have passed repatriation legislation. These laws were passed in response to specific repatriation requests. Three are general repatriation laws, and two are specific to Kansas, Nebraska, and Arizona.

In 1989, Hawaii appropriated \$100,000 to the National Park Service to purchase a Native Hawaiian developer who had dug up over \$500,000 of those funds were

Similarly, in 1989, Kansas enacted a reburial agreement between the state and three Indian tribes that had been disturbed by the descendant tribes.<sup>84</sup> In 1991, the Nebraska Historical Society obtained legislative approval to repatriate Pawnee Indian remains that had been obtained from vandalized graves.

In 1989, Nebraska enacted "Unmarked Human Burial Site Protection Act." This landmark legislation requires the state to repatriate "reasonably identifiable human remains of known origin on request."<sup>88</sup> Under Nebraska law, the state has repatriated over 400 Pawnee dead from the Pawnee Tribe reburied the dead at the Nebraska State Historical Society.

80. 267 Cal. Rptr. 804 (Ct. App. 1989).

81. 455 N.W.2d 512 (Minn. Ct. App. 1985).

82. No. 90-06-9830-E, slip op. at 1 (Minn. Ct. App. 1990).

83. 1989 Haw. Sess. Laws 316, item 1.

84. Kansas Appropriations Act of 1990, § 100-1000.

85. 1991 Kansas Senate Bill No. 70.

86. *Id.*

87. NEB. REV. STAT. § 12-1201 (1989).

88. NEB. REV. STAT. §§ 12-1209-12-1210 (1989).

89. Bob Reeves, *Pawnee Remains* 1 (1990), at 1, 5.

90. After the repatriation law pa-

laws has been uniformly upheld in recent cases such as *People v. Van Horn*,<sup>80</sup> *Thompson v. City of Red Wing*,<sup>81</sup> and *State of Oregon and the Burns-Paiute Tribe v. Castoe*.<sup>82</sup>

## 2. Repatriation Legislation

Five states have passed repatriation statutes since 1989. Three statutes were passed in response to specific repatriation and reburial matters, and three are general repatriation laws. The five states are California, Hawaii, Kansas, Nebraska, and Arizona.

In 1989, Hawaii appropriated \$5 million from its Land Banking Law to purchase a Native Hawaiian burial ground owned by a private developer who had dug up over 900 remains in order to build a hotel—\$500,000 of those funds were used to rebury the dead.<sup>83</sup>

Similarly, in 1989, Kansas passed implementing legislation concerning a reburial agreement between state officials; the owner of a tourist attraction, which displayed 165 Indians from an Indian burial ground; and three Indian tribes that provided that the dead would be reburied by the descendant tribes.<sup>84</sup> In addition, in 1991, the Kansas State Historical Society obtained legislation to allow it to deaccession and repatriate Pawnee Indian remains in its collection.<sup>85</sup> The remains had been obtained from vandalized graves.<sup>86</sup>

In 1989, Nebraska enacted a general repatriation statute entitled the "Unmarked Human Burial Sites and Skeletal Remains Protection Act."<sup>87</sup> This landmark legislation requires all state-recognized museums to repatriate "reasonably identifiable" remains and grave goods to tribes of origin on request.<sup>88</sup> Under Nebraska's law, the Pawnee Tribe repatriated over 400 Pawnee dead from the Nebraska State Historical Society.<sup>89</sup> The Pawnee Tribe reburied the dead in 1990—despite continued resistance by the Nebraska State Historical Society.<sup>90</sup>

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80. 267 Cal. Rptr. 804 (Ct. App. 1990).

81. 455 N.W.2d 512 (Minn. Ct. App. 1990).

82. No. 90-06-9830-E, slip op. at 5-8 (Cir. Ct. Harney County, Or., Feb. 11, 1991).

83. 1989 Haw. Sess. Laws 316, item K-16.

84. Kansas Appropriations Act of 1989 (S.B. No. 39 & S.B. No. 68).

85. 1991 Kansas Senate Bill No. 7.

86. *Id.*

87. NEB. REV. STAT. § 12-1201 (1990); see also Robert Peregoy, *The Legal Basis, Legislative History, and Implementation, of Nebraska's Landmark Reburial Legislation*, 24 ARIZ. ST. L.J. 329 (1992).

88. NEB. REV. STAT. §§ 12-1209-1210 (1990).

89. Bob Reeves, *Pawnee Remains Going "Home" After Long Wait*, LINCOLN STAR, Sept. 11, 1990, at 1, 5.

90. After the repatriation law passed, the Nebraska State Historical Society ("NSHS") sued

In 1990, Arizona passed a sweeping repatriation statute to repatriate human remains, funerary objects, sacred objects, and objects of tribal patrimony.<sup>91</sup> Under this law, culturally or religiously affiliated remains held by state agencies are repatriated to tribes of origin.<sup>92</sup> Moreover, remains that are not culturally affiliated with a tribe still must be reburied within one year nearest to the place where the remains were discovered.<sup>93</sup>

Finally, in 1991, California passed a law that makes it the policy of the State that Native American remains and associated grave artifacts shall be repatriated.<sup>94</sup>

During the same period that individual states started to enact legislation designed to ensure appropriate treatment of Indian human remains and funerary objects, the Federal Government, at the urging of Indian tribes and national organizations, also began to seriously consider the need for uniform, national legislation addressing this issue. That process culminated in the enactment of the Native American Graves Protection and Repatriation Act in 1990.

### B. Federal Legislation

#### 1. Background

In 1986, a number of Northern Cheyenne leaders discovered that almost 18,500 human remains were warehoused in the Smithsonian Institution.<sup>95</sup> This discovery served as a catalyst for a concerted national

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the Tribe to prevent it from examining NSHS records relating to its collection of dead Pawnee Indians. NSHS claimed that it was not a public agency subject to state open records laws. Nebraska State Historical Soc'y v. Pawnee Tribe, No. 448 (Lancaster, Neb. filed Jan. 23, 1990). The State of Nebraska intervened on the Tribe's side, and all NSHS claims were rejected by the court. (Order of May 31, 1991). (The Tribe's motion for attorney's fees is pending). In addition, even though NSHS returned almost 400 dead to the Tribe in September 1990, an arbitration award requires NSHS to repatriate additional remains and burial goods to the Pawnee Tribe. *In re Pawnee Tribe* (Arbitration Award, Mar. 12, 1991). For an in-depth treatment of this controversy, see generally, Roger C. Echo-Hawk & Walter R. Echo-Hawk, *Repatriation, Reburial and Religious Rights, in HANDBOOK OF AMERICAN INDIAN RELIGIOUS FREEDOM* 63-80 (Christopher Vecsey ed., 1991).

91. ARIZ. REV. STAT. ANN. §§ 41-844, -865 (1992) (reprinted in appendix); see also Paul Bender, 1990 *Arizona Repatriation Legislation*, 24 ARIZ. ST. L.J. 391 (1992).

92. ARIZ. REV. STAT. ANN. § 41-844(K), (F).

93. *Id.* § 41-844(K), (G).

94. CALIFORNIA PUB. RES. CODE § 5097.99 (West 1991). In announcing passage of this law, its sponsor, Assemblyman Richard Katz, stated that:

[N]o other race has had to endure the injustice that the Native American community has had to suffer in knowing that their relatives' and ancestors' skeletal remains are lying in a box in some university or museum, when what they deserve is a proper burial by their loved ones. . . . The passage of this bill is the first step in the settlement of a long-overlooked human rights issue.

Letter from Richard Katz, California Assemblyman, to Walter R. Echo-Hawk, Attorney, Native American Rights Fund (Sept. 18, 1991) (on file with author).

95. Douglas J. Preston, *Skeletons in our Museums' Closets*, HARPER'S, Feb. 1989, at 68.

effort by Indian tribes and others to repatriate human remains and cultural artifacts of the deceased. Between 1989 and 1991, bills were introduced in the 99th, 100th, and 101st Congresses.

In the 99th and 100th Congresses, Senator John McCain, from Montana, introduced bills to establish a Native American Museum and Commission. The Commission was intended to resolve disputes between museums and tribes over the repatriation of "skeletal remains which have religious or cultural significance." These bills, which would have represented basic human respect for the dead, were fundamentally important. Although the bills were introduced, efforts failed, to issue ordinances. The legislation was vigorously opposed by the American Association of Museums and the American Association of Archeology.<sup>100</sup> Consequently, the bills did not become law.

In the 101st Congress, the Senate version of the Native American Graves Protection and Repatriation Act was introduced by Senator John McCain, a Republican from Arizona; Representative Dennis H. Kucinich, a Democrat from Hawaii; Representative George E. Brown, Jr., a Democrat from California; and Representative Charles G. Renfro, a Democrat from Kentucky. All four introduced bills dealing with the issue.

Each of the bills attempted to provide for the protection and repatriation of burial sites, albeit in different ways. The McCain and Udall bills provided for the protection of burial sites and for the repatriation of human remains and cultural artifacts.

96. S. 2952, 99th Cong., 2d Sess. (1986).

97. *Senate Hearing on S. 187*, subcommittee on Indian Affairs, 99th Cong., 1st Sess. (1986).

98. *Id.* at 92 (statement of Sen. John McCain).

99. *Id.* at 25-46 (amended text of S. 2952).

100. *Id.* at 46-72, 95-137, 376-81.

101. Senator McCain introduced S. 2952, 101st Cong., 1st Sess. (1989) and H.R. 5237, 101st Cong., 2d Sess. (1989) & H.R. 5237, 101st Cong., 1st Sess. (1989). In addition, Representative Dennis H. Kucinich introduced a Native American Graves Protection and Repatriation bill to the House of Representatives in the 101st Congress. The bill was introduced in the House on March 10, 1989, and referred to the House Committee on Natural Resources. The bill was reported to the House on April 12, 1989, and passed the House on April 12, 1989. The bill was signed into law on April 12, 1989, as part of the Omnibus Consolidated Appropriations Act, 1990, P.L. No. 101-239, 103 Stat. 232, 233 (1989).

102. S. 1021, 101st Cong., 1st Sess. (1989) and H.R. 5237, 101st Cong., 1st Sess. (1989). The bill was introduced in the House on January 13, 1989, and referred to the House Committee on Natural Resources. The bill was reported to the House on February 1, 1989, and passed the House on February 1, 1989. The bill was signed into law on February 1, 1989, as part of the Omnibus Consolidated Appropriations Act, 1990, P.L. No. 101-239, 103 Stat. 232, 233 (1989).

effort by Indian tribes and organizations to obtain legislation to repatriate human remains and cultural artifacts to Indian tribes and descendants of the deceased. Between 1986 and 1990, a number of bills were introduced in the 99th, 100th, and 101st Congresses to address this issue.

In the 99th and 100th Congresses, Senator John Melcher, a Democrat from Montana, introduced bills that would have provided for the creation of a Native American Museum Claims Commission ("Commission").<sup>96</sup> The Commission was intended to provide a mechanism for the resolution of disputes between museums and Native Americans regarding the repatriation of "skeletal remains, cultural artifacts, and other items of religious or cultural significance."<sup>97</sup> The bill's purpose was "to demonstrate basic human respect to Native Americans on these issues which are fundamentally important to them."<sup>98</sup> In its final form, the Commission would have been empowered to mediate disputes, and, if such efforts failed, to issue orders following an evidentiary hearing.<sup>99</sup> The legislation was vigorously opposed by, *inter alia*, the Smithsonian Institution, the American Association of Museums, and the Society for American Archeology.<sup>100</sup> Consequently, the bill was not enacted.

In the 101st Congress, the Commission approach was abandoned in favor of legislation that would directly require repatriation of human remains and cultural artifacts, and protect burial sites. Senator John McCain, a Republican from Arizona; Senator Daniel Inouye, a Democrat from Hawaii; Representative Morris Udall, a Democrat from Arizona; and Representative Charles Bennett, a Democrat from Florida, each introduced bills dealing with different aspects of the repatriation issue.<sup>101</sup>

Each of the bills attempted to protect against the future illegal excavation of burial sites, albeit in a different manner.<sup>102</sup> The McCain, Inouye, and Udall bills provided for an inventory, notice, and repatriation process for human remains and certain cultural artifacts in the possession of

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96. S. 2952, 99th Cong., 2d Sess. (1986); S. 187, 100th Cong., 1st Sess. (1987).

97. *Senate Hearing on S. 187*, *supra* note 61, at 1 (statement of Sen. Inouye).

98. *Id.* at 92 (statement of Sen. Melcher).

99. *Id.* at 25-46 (amended text of S. 187 & statement of Sen. Inouye).

100. *Id.* at 46-72, 95-137, 376-81.

101. Senator McCain introduced S. 1021, 101st Cong., 1st Sess. (1989); Senator Inouye introduced S. 1980, 101st Cong., 1st Sess. (1989); Rep. Udall introduced H.R. 1646, 101st Cong., 1st Sess. (1989) & H.R. 5237, 101st Cong., 2d Sess. (1990); and Rep. Bennett introduced H.R. 1381, 101st Cong., 1st Sess. (1989). In addition, Rep. Bennett sought to attach a comprehensive graves protection and repatriation bill to the Fiscal Year 1991 Defense Appropriations Bill, H.R. 4739, 101st Cong., 2d Sess. (1990).

102. S. 1021, 101st Cong., 1st Sess. § 5 (1989); S. 1980, 101st Cong., 1st Sess. § 4 (1989); H.R. 1381, 101st Cong., 1st Sess. § 3 (1989); H.R. 1646, 101st Cong., 1st Sess. § 4(b), (c) (1989); H.R. 5237, 101st Cong., 2d Sess. § 3 (1990).



remains or objects are identified by a preponderance of the evidence, the Indian tribe must be promptly notified.<sup>114</sup> Upon request of a lineal descendant or culturally affiliated tribe, human remains and funerary objects associated with those remains are required to be expeditiously returned.<sup>115</sup> Associated funerary objects include both those objects found with the remains and objects "removed from a specific burial site of an individual culturally affiliated with a particular Indian tribe."<sup>116</sup> The Museum Act establishes a special committee to monitor and review the "inventory, identification, and return of Indian human remains and Indian funerary objects," including assistance in the resolution of disputes concerning repatriation.<sup>117</sup>

The repatriation provisions in the Museum Act were the result of an agreement between the Smithsonian Institution and Indian leaders.<sup>118</sup> The Museum Act's repatriation provisions were aimed at rectifying "some of the injustices done to Indian people over the years" and providing the promise that "one day their ancestors will finally be given the resting place that they so deserve."<sup>119</sup> In his statement during debate, Senator John McCain, Republican from Arizona, specifically noted that this bill "is an important first step . . . [that] sends a clear signal to those in the museum community who have dismissed repatriation as a transitory issue that they would be wise to carefully consider the bills [pertaining to museums and federal agencies other than the Smithsonian] currently before the Congress."<sup>120</sup>

The Museum Act set an important precedent later cited by supporters of the Native American Graves Protection and Repatriation Act during the floor debate preceding the passage of NAGPRA.<sup>121</sup>

### 3. Panel for a National Dialogue on Museum/Native American Relations

The second event involved the creation of a year-long dialogue, which was suggested by the American Association of Museums and sponsored by the Heard Museum in Arizona. The participants in the dialogue were

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114. *Id.* § 80q-9(b).

115. *Id.* § 80q-9(c).

116. *Id.* § 80q-9(d).

117. *Id.* § 80q-10(a).

118. 135 CONG. REC. S12388 (daily ed. Oct. 3, 1989) (statement of Sen. Inouye).

119. *Id.*; 135 CONG. REC. H8448 (daily ed. Nov. 13, 1989) (statement of Rep. Rahall).

120. 135 CONG. REC. S12397 (daily ed. Oct. 3, 1989) (statement of Sen. McCain).

121. 136 CONG. REC. H10988-10989 (daily ed. Oct. 22, 1990) (statements of Rep. Campbell and Rep. Rhodes); 136 CONG. REC. S17174-17175 (daily ed. Oct. 26, 1990) (statements of Sen. Inouye and Sen. Akaka).

museums, scientists, and Native Americans. The dialogue centered around the appropriate treatment of human remains and cultural artifacts. In early 1990, the *Report of the Panel for a National Dialogue on Museum/Native American Relations* ("Panel") was issued.<sup>122</sup> As summarized in the report of the Senate Select Committee on Indian Affairs pertaining to NAGPRA, the major conclusions of the Panel were as follows:

The Panel found that the process for determining the appropriate disposition and treatment of Native American human remains, funerary objects, sacred objects, and objects of cultural patrimony should be governed by respect for Native human rights. The Panel report states that human remains must at all times be accorded dignity and respect. The Panel report indicated the need for Federal legislation to implement the recommendations of the Panel.

The Panel also recommended the development of judicially-enforceable standards for repatriation of Native American human remains and objects. The report recommended that museums consult with Indian tribes to the fullest extent possible regarding the right of possession and treatment of remains and objects prior to acquiring sensitive materials. Additional recommendations of the Panel included requiring regular consultation and dialogue between Indian tribes and museums; providing Indian tribes with access to information regarding remains and objects in museum collections; providing that Indian tribes should have the right to determine the appropriate disposition of remains and funerary objects and that reasonable accommodations should be made to allow valid and respectful scientific use of materials when it is compatible with tribal religious and cultural practices.<sup>123</sup>

As the legislative history indicates, the Panel report "provided a framework" for NAGPRA.<sup>124</sup>

## V. NAGPRA

On November 16, 1990, the Native American Graves Protection and Repatriation Act was signed into law.<sup>125</sup> NAGPRA is a complex law that

sets out detailed procedures and limitations for the handling of human remains, funerary objects, and objects of cultural patrimony, and provides for the return of materials unearthed on federal and state lands.

### A. Legislative History

NAGPRA is, first and foremost, a response to the needs of Native citizens.<sup>126</sup> When NAGPRA was introduced in the Senate, Senator Inouye stated that:

When the Army Surgeon General excavated Indian osteological remains during the Korean War, demands were enthusiastically met by Army medical personnel, but by collectors who sold them to the Army Medical Museum. The dead were ignored. In fact, collectors were in the habit of robbing graves often speaking of the Indians as "squatters" when Indians caught them digging.

When human remains are found in Indian societies, it is never the bones of settlers or other non-Indians that came to this country before the Indian remains. The message is that Indians are culturally and scientifically inferior to non-Indians. This is racism.

In light of the important role played by Indians in native American cultures, it is important to recognize the rights of America's first citizens. In the past century, much has been made to recognize the rights of Indians to their remains of their ancestors and to their cultural patrimony, the wishes of which are to be honored by the scientific community. When Indians attempted to regain items that belonged to the tribe, they have often met with resistance.

[T]he bill before us is not designed to interfere with the value of scientific inquiry. Rather, it is designed to protect the rights of Indians and the museums that have dealt honorably with them. For Native Americans, this legislation will open up new opportunities for institutions which have consigned their remains to negotiate.<sup>127</sup>

122. REPORT OF THE PANEL FOR A NAT'L DIALOGUE ON MUSEUM/NATIVE AMERICAN RELATIONS (Feb. 28, 1990) (reprinted in appendix).

123. SENATE REPORT 473, *supra* note 108, at 2-3. The House Report pertaining to NAGPRA noted further that the "majority [of the Panel] believed that 'Respect for Native human rights is the paramount principle that should govern resolution of the issue when a claim is made.'" HOUSE REPORT 877, *supra* note 108, at 10-11.

124. 136 CONG. REC. S17173 (daily ed. Oct. 26, 1990) (statement of Sen. McCain); *see also* 136 CONG. REC. H10989 (daily ed. Oct. 22, 1990) (statement of Rep. Rhodes) (report "helped immensely to shape the policies contained in this bill"); 136 CONG. REC. S17174 (daily ed., Oct. 26, 1990) (statement of Sen. Inouye); SENATE REPORT 473, *supra* note 108, at 6 ("The Committee agrees with the findings and recommendations of the Panel for a National Dialogue on Museum/Native American Relations.").

125. 25 U.S.C.A. §§ 3001-3013.

126. 136 CONG. REC. S17174 (daily ed. Oct. 26, 1990).

127. *Id.* at S17174-17175.

sets out detailed procedures and legal standards governing the repatriation of human remains, funerary objects, sacred objects, and objects of cultural patrimony, and provides for the protection and ownership of materials unearthed on federal and tribal lands.

#### A. Legislative Intent

NAGPRA is, first and foremost, human rights legislation. It is designed to address the flagrant violation of the "civil rights of America's first citizens."<sup>126</sup> When NAGPRA was passed by the Senate, Senator Daniel Inouye stated that:

When the Army Surgeon General ordered the collection of Indian osteological remains during the second half of the 19th Century, his demands were enthusiastically met not only by Army medical personnel, but by collectors who made money from selling Indian skulls to the Army Medical Museum. The desires of Indians to bury their dead were ignored. In fact, correspondence from individuals engaged in robbing graves often speaks of the dangers these collectors faced when Indians caught them digging up burial grounds.

When human remains are displayed in museums or historical societies, it is never the bones of white soldiers or the first European settlers that came to this continent that are lying in glass cases. It is Indian remains. The message that this sends to the rest of the world is that Indians are culturally and physically different from and inferior to non-Indians. This is racism.

In light of the important role that death and burial rites play in native American cultures, it is all the more offensive that the civil rights of America's first citizens have been so flagrantly violated for the past century. Even today, when supposedly great strides have been made to recognize the rights of Indians to recover the skeletal remains of their ancestors and to reposess items of sacred value or cultural patrimony, the wishes of native Americans are often ignored by the scientific community. In cases where native Americans have attempted to regain items that were inappropriately alienated from the tribe, they have often met with resistance from museums. . . .

[T]he bill before us is not about the validity of museums or the value of scientific inquiry. Rather, it is about human rights. . . . For museums that have dealt honestly and in good faith with native Americans, this legislation will have little effect. For museums and institutions which have consistently ignored the requests of native Americans, this legislation will give native Americans greater ability to negotiate.<sup>127</sup>

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126. 136 CONG. REC. S17174 (daily ed. Oct. 26, 1990) (statement of Sen. Inouye).

127. *Id.* at S17174-17175.

Other parts of the legislative history also emphasize the “human rights” genesis of NAGPRA. The antecedants and progenitors of NAGPRA were repatriation provisions of the National Museum of the American Indian Act and the Report of the Panel for a National Dialogue on Museum/Native American Relations—both of which placed a major emphasis upon “human rights.”<sup>128</sup>

Congress viewed NAGPRA as a part of its trust responsibility to Indian tribes and people, specifically stating that it "reflects the unique relationship between the Federal Government and Indian tribes and Native Hawaiian organizations."<sup>129</sup> The trust responsibility of the Federal Government to Indian tribes and people is a judicially-created concept that requires the United States to "adhere strictly to fiduciary standards in its dealings with Indians."<sup>130</sup> The trust doctrine has given rise to the principle that enactments dealing with Indian affairs are to be liberally construed for the benefit of Indian people and tribes<sup>131</sup>—a canon of construction similar to that applicable to remedial civil rights legislation.<sup>132</sup>

The bill that was enacted reflected a compromise forged by representatives of the museum, scientific, and Indian communities.<sup>133</sup> NAGPRA was designed to create a process that would reflect both the needs of museums as repositories of the nation's cultural heritage and the rights of Indian people. Most importantly, NAGPRA was intended to "establish a process that provides the dignity and respect that our Nation's first citizens deserve."<sup>134</sup> Congress believed that NAGPRA would "encourage a continuing dialogue between museums and Indian tribes and Native

128. See *supra* text accompanying notes 117-22.

129. 25 U.S.C.A. § 3010. For this reason, Congress stated in this section that NAGPRA should not be interpreted "to establish a precedent with respect to any other individual, organization or foreign government." *Id.*

<sup>130.</sup> COHEN, *supra* note 76, at 207.

<sup>131</sup> *Id.* at 223-24.

<sup>132</sup> See, e.g., *Green v. Dumke*, 480 F.2d 624, 628 n.7 (9th Cir. 1973); *Schorle v. City of Greenhills*, 524 F. Supp. 821, 825 (S.D. Ohio 1981).

133. 136 CONG. REC. S17173 (daily ed. Oct. 26, 1990) (statement of Sen. McCain); see also Daniel Monroe & Walter Echo-Hawk, *Deft Deliberations*, MUSEUM NEWS, July/Aug. 1991, at 55-58. In fact, a broad spectrum of national museum, scientific, and Native American organizations jointly sent a letter to President Bush urging him to sign this legislation. Letter from American Anthropological Association, Association of Physical Anthropologists, Archeological Institute of America, Association on American Indian Affairs, Native American Rights Fund, National Conference of State Historic Preservation Officers, National Congress of American Indians, National Trust for Historic Places, Preservation Action, Society for American Archaeology, Society for Historical Archaeology, and Society for Professional Archaeology to President Bush. (Nov. 2, 1990) (on file with author).

<sup>134.</sup> 136 CONG. REC. S17173 (daily ed. Oct. 26, 1990) (statement of Sen. McCain). Both Senators McCain and Inouye recognized the importance of museums in maintaining our cultural heritage, as well as the interest of Native Americans in the return of ancestral human remains and funerary

Hawaiian organizations and the groups."<sup>135</sup> The primary Protection and Repatriation

### *B. Repatriation: Human*

NAGPRA requires federal  
tution)<sup>136</sup> and museums (inclu-  
cational institutions)<sup>137</sup> to re-  
objects upon request of a  
Hawaiian organization<sup>139</sup> w/  
the cultural affiliation of  
process.<sup>140</sup> In addition, if a m/  
the affiliation of the human  
Indian tribe or Native Hawa-  
of the remains or objects i/

objects, sacred objects, and items of  
Oct. 26, 1990)

135. SENATE REPORT 473, *supra* note 13.

136. 25 U.S.C.A. § 3001(8). The culturally-affiliated human remains and American Indian Act, 20 U.S.C.A. § 107-111, notes 109-21. The Museum Act does not apply. Senator Daniel K. Inouye, Democrat, Smithsonian Institution in the 102d Congress, items of cultural patrimony. S. 235, American Indian ("NMAI") has added repatriation of communally-owned property. The NMAI, however, consists at present of the Heye collection in New York prior to its incorporation into the Smithsonian Institution. See 20 U.S.C.A. § 80q-2. The NMAI possesses a large number of human remains.

137. "Museum" is defined as "any institution of higher learning) that Native American cultural items." 25 U to refer to institutions that meet this d

138. "Indian tribe" is defined as a group of Indians, including any Alaska Native programs and services provided by the *Id.* § 3001(7). This definition includes the United States government, not *See id.*

139. "Native Hawaiian organization represents the interests of Native Hawaiians of services to Native Hawaiians, and (C) The Office of Hawaiian Affairs and included in the definition. *Id.*

<sup>140.</sup> 25 U.S.C.A. § 3005(a)(1); see

Hawaiian organizations and . . . promote greater understanding between the groups.”<sup>135</sup> The primary features of the Native American Graves Protection and Repatriation Act of 1990 are summarized below.

#### B. Repatriation: Human Remains and Associated Funerary Objects

NAGPRA requires federal agencies (excluding the Smithsonian Institution)<sup>136</sup> and museums (including state and local governments and educational institutions)<sup>137</sup> to return human remains and associated funerary objects upon request of a lineal descendent, Indian tribe,<sup>138</sup> or Native Hawaiian organization<sup>139</sup> where the museum or agency itself identifies the cultural affiliation of the items through the required inventory process.<sup>140</sup> In addition, if a museum or agency inventory does not establish the affiliation of the human remains or associated funerary objects, the Indian tribe or Native Hawaiian organization may still obtain the return of the remains or objects if it can prove, by a preponderance of the

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objects, sacred objects, and items of cultural patrimony. 136 CONG. REC. S17173-17175 (daily ed. Oct. 26, 1990).

135. SENATE REPORT 473, *supra* note 108, at 6.

136. 25 U.S.C.A. § 3001(8). The Smithsonian Institution is required to inventory and return culturally-affiliated human remains and funerary objects pursuant to the National Museum of the American Indian Act, 20 U.S.C.A. §§ 80q to 80q-15 (West 1990). See *supra* text accompanying notes 109-21. The Museum Act does not cover sacred objects and items of cultural patrimony. See *id.* Senator Daniel K. Inouye, Democrat from Hawaii, has introduced a bill pertaining to the Smithsonian Institution in the 102d Congress that includes provisions addressing sacred objects and items of cultural patrimony. S. 235, 102d Cong., 1st Sess. (1991). The National Museum of the American Indian (“NMAI”) has adopted its own repatriation policy, which provides for the repatriation of communally-owned property and sacred objects pursuant to certain criteria. Most of the NMAI, however, consists at present of those Indian remains and cultural objects that were part of the Heye collection in New York prior to the absorption of the Heye collection by the Smithsonian Institution. See 20 U.S.C.A. § 80q-2. It does not cover the Smithsonian Institution itself, which possesses a large number of human remains and funerary objects.

137. “Museum” is defined as “any institution or State or local government agency (including any institution of higher learning) that receives Federal funds and has possession of, or control over, Native American cultural items.” 25 U.S.C.A. § 3001(8). The term *museum* is used in this article to refer to institutions that meet this definition unless otherwise indicated.

138. “Indian tribe” is defined as a “tribe, band, nation, or other organized group or community of Indians, including any Alaska Native village . . . which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians.” *Id.* § 3001(7). This definition includes tribes eligible for special programs and services from any part of the United States government, not merely those receiving services from the Secretary of Interior. See *id.*

139. “Native Hawaiian organization” is defined as “any organization which: (A) serves and represents the interests of Native Hawaiians, (B) has as a primary and stated purpose the provision of services to Native Hawaiians, and (C) has expertise in Native Hawaiian affairs.” *Id.* § 3001(11). The Office of Hawaiian Affairs and Hui Mālama I Nā Kūpuna ‘O Hawai‘i Nei are specifically included in the definition. *Id.*

140. 25 U.S.C.A. § 3005(a)(1); see also *infra* text accompanying notes 147-50.

evidence, that it has a cultural affiliation with the item.<sup>141</sup> In seeking to prove cultural affiliation, a claimant may utilize "geographical, kinship, biological, archaeological, anthropological, linguistic, folkloric, oral traditional, historical, or other relevant information or expert opinion."<sup>142</sup>

Upon request, Indian tribes and Native Hawaiian organizations must be provided with available documentation by agencies and museums.<sup>143</sup> NAGPRA indicates that such documentation shall be made available to Indian tribes or Native Hawaiian organizations that receive or should have received notice pursuant to 25 U.S.C.A. § 3003(d)—namely, those tribes that are believed to be culturally affiliated with specific items. The legislative history recognizes that § 3003(d) is to be liberally construed to include all tribes that have “a potential cultural affiliation (regardless of whether the showing of such affiliation would be based upon museum records or non-museum sources).”<sup>144</sup> Available documentation includes “a summary of existing museum or Federal agency records, including inventories or catalogues, relevant studies, or other pertinent data.”<sup>145</sup> This requirement, however, is not an authorization for the initiation of new scientific studies—although it does not preclude further scientific study either.<sup>146</sup>

"Cultural affiliation" is defined as "a relationship of shared group identity which can be reasonably traced historically or prehistorically between a present day Indian tribe or Native Hawaiian organization and an identifiable earlier group."<sup>147</sup> The House committee explained that this requirement "is intended to ensure that the claimant has a reasonable connection with the materials."<sup>148</sup> Congress recognized, however, that

141. 25 U.S.C.A. § 3005(a)(4). Section 3005(a)(4) does not explicitly provide for a claim to be filed by a known lineal descendant. *Id.* It is unlikely that § 3005(a)(4) was intended to exclude claims by descendants, however, because 25 U.S.C.A. § 3005(a)(1) specifically permits descendant claims for human remains and associated funerary objects if the inventory process leads to the identification of a known descendant. Moreover, 25 U.S.C.A. § 3005(a)(5)(A) permits a lineal descendant of an individual who owned a sacred object to claim that object. Indeed, NAGPRA is based, in part, upon common law pertaining to the control of human remains and funerary objects. Common law recognizes that the next of kin retains control over buried human remains and associated funerary objects. *See supra* text accompanying notes 53-57. Thus, the exclusion of descendants from § 3005(a)(4) is undoubtedly because that section establishes rules for proving cultural affiliation—a requirement not applicable to descendants. The legislative history supports this interpretation. The House report describes § 3005 as requiring “all returns to be completed in consultation with the requesting descendent, tribe or Native Hawaiian organization.” HOUSE REPORT 877, *supra* note 108, at 19.

142. 25 U.S.C.A. § 3005(a)(4).

143. *Id.* § 3003(b)(2).

144. HOUSE REPORT 877, *supra* note 108, at 16.

145. 25 U.S.C.A. § 3003(b)(2).

146. *Id.*

147. *Id.* § 3001(2).

148. HOUSE REPORT 877, *supra* note 108, at 14.

[I]t may be extremely difficult to trace an item from most sources without some reasonable suspicion. In such instances, a finding is based upon an overall evaluation of all the evidence pertaining to the item and the material being claimed as evidence. The presence of some gaps in the record does not necessarily mean that the item is not what it is claimed to be.

Therefore, claimants need no certainty.”<sup>150</sup>

"Associated funerary objects" includes objects "reasonably believed to have been used in or otherwise associated with an individual human remains either during the death rite or ceremony or are presently in the possession of the death rite or ceremony or are presently in the possession of the same agency or museum or agency so that a disposition is possible.<sup>151</sup> Moreover, the congressional intent to include museums not covered under NAGPRA extends to the disposition of those objects covered by NAGPRA.<sup>152</sup>

Second, "associated funds made for burial purposes or

Two exceptions exist to associated funerary objects affiliation has been determined.

149. *Id.*

150. SENATE REPORT 473, *supra* n. application of a stricter definition of NAGPRA. S. 1980, 101st Cong., 2d affilition" that would have required present day group" be "reasonably est.

151. 25 U.S.C.A. § 3001(3)(A).

152. *Id.*

153. See, e.g., *id.* §§ 3001(3)(A),(I).

154. *Id.* § 3001(3)(A). If the human agency or covered museum (and the facility to contain human remains), the obligation is under § 3001(3)(B); *see infra* text accompanying

155. 25 U.S.C.A. § 3005(a)(1) and associated funerary objects refer only to the requirement that the remains a

[I]t may be extremely difficult, in many instances, for claimants to trace an item from modern Indian tribes to prehistoric remains without some reasonable gaps in the historic or prehistoric record. In such instances, a finding of cultural affiliation should be based upon an overall evaluation of the totality of the circumstances and evidence pertaining to the connection between the claimant and the material being claimed and should not be precluded solely because of some gaps in the record.<sup>149</sup>

Therefore, claimants need not establish cultural affiliation with "scientific certainty."<sup>150</sup>

"Associated funerary objects" includes two categories of objects. First, it includes objects "reasonably believed to have been placed with individual human remains either at the time of death or later . . . as part of the death rite or ceremony" where both the human remains or objects are presently in the possession or control of a federal agency or museum.<sup>151</sup> The remains and objects need not be in the possession or control of the same agency or museum—only in the possession or control of a museum or agency so that a connection between the objects and remains is possible.<sup>152</sup> Moreover, the "possession or control" language indicates congressional intent to include objects consigned to individuals or museums not covered under NAGPRA if the ultimate determination as to the disposition of those objects is reposed in a federal agency or museum covered by NAGPRA.<sup>153</sup>

Second, "associated funerary objects" includes objects "exclusively made for burial purposes or to contain human remains."<sup>154</sup>

Two exceptions exist to the requirement that human remains and associated funerary objects be "expeditiously returned" after cultural affiliation has been determined.<sup>155</sup> The first exception is in those circum-

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149. *Id.*

150. SENATE REPORT 473, *supra* note 108, at 8. The Senate Report's statement referred to the application of a stricter definition of cultural affiliation that was contained in an earlier version of NAGPRA. S. 1980, 101st Cong., 2d Sess. (1990). That version included a definition of "cultural affiliation" that would have required that "a continuity of group identity from the earlier to the present day group" be "reasonably establishe[d]." *Id.*

151. 25 U.S.C.A. § 3001(3)(A).

152. *Id.*

153. See, e.g., *id.* §§ 3001(3)(A),(B), 3001(8), 3003(a), 3004(a).

154. *Id.* § 3001(3)(A). If the human remains are no longer in the possession or control of an agency or covered museum (and the funerary objects were not specifically made for burial purposes or to contain human remains), the objects may be classified as "unassociated funerary objects." *Id.* § 3001(3)(B); see *infra* text accompanying note 165.

155. 25 U.S.C.A. § 3005(a)(1) and the portion of § 3005(a)(4) applicable to human remains and associated funerary objects refer only to subsections (b) and (e) of 25 U.S.C.A. § 3005 as exceptions to the requirement that the remains and associated funerary objects be expeditiously returned.

stances where the item is "indispensable for completion of a specific scientific study, the outcome of which would be of major benefit to the United States."<sup>156</sup> If this exception applies, the items must be returned within 90 days after the completion of the study.<sup>157</sup> There is no prohibition, however, against voluntary agreements between claimants and agencies or museums that would permit additional studies or other arrangements in regard to cultural items.<sup>158</sup>

The second exception applies if multiple requests for a cultural item are made, and the federal agency or museum "cannot clearly determine which requesting party is the most appropriate claimant."<sup>159</sup> In such a case, the federal agency or museum may retain the item until the parties agree upon disposition (with the Review Committee available for a mediating role) or the dispute is resolved by a court of competent jurisdiction.<sup>160</sup>

As for human remains and associated funerary objects whose cultural affiliation cannot be determined, NAGPRA provides that the statutorily-created Review Committee<sup>161</sup> compile an inventory of culturally unidentifiable human remains and recommend "specific actions for developing a process for disposition of such remains."<sup>162</sup> The Review Committee's recommendations are to be made "in consultation with Indian tribes and Native Hawaiian organizations and appropriate scientific and museum groups."<sup>163</sup> This issue was referred to the Review Committee because there was "general disagreement on the proper disposition of such unidentifiable remains. Some believe that they should be left solely to science while others contend that, since they are not identifiable, they would be of little use to science and should be buried and laid to rest."<sup>164</sup>

156. 25 U.S.C.A. § 3005(b).

157. *Id.*

158. *Id.* § 3009(1)(B).

159. *Id.* § 3005(e).

160. *Id.* Section 3005(e) also provides that the dispute may be settled “pursuant to the provisions of the Act.” *Id.* This refers to the authority of the Review Committee created by 25 U.S.C.A. § 3006 to “facilitat[e] the resolution of any disputes among Indian tribes, Native Hawaiian organizations, or lineal descendants and Federal agencies or museums relating to the return of such items including convening the parties to the dispute if deemed desirable.” *Id.* § 3006(c)(4). Although any findings of the Committee are admissible in a court proceeding, the Committee has no binding authority upon any of the parties. *Id.* § 3006(d). Thus, while the Committee can certainly play an important role in resolving these disputes, ultimately the disputes must be resolved by agreement or judicial determination.

161. 25 U.S.C.A. § 3006.

162. *Id.* § 3006(c)(5).

163. *Id.* § 3006(e).

164. HOUSE REPORT 877, *supra* note 108, at 16. The House Interior Committee indicated that:

### *C. Repatriation: Unassociated Items*

NAGPRA requires museums to inventory all associated funerary objects, sacred objects, and objects of cultural patrimony pursuant to a four-step process.

## 1. Identification of the Itc

First, the claimant must show a "funerary object, sacred object or associated funerary object" is to have been placed with individuals who died of death or later . . . as part of human remains are *not* presented to a federal agency or museum, individuals, families, or known site of a culturally affiliated individual.

"Sacred objects" are definitely needed by traditional Native adherents."<sup>167</sup> As the House I

[T]he definition of "sacred objects needed for ceremonial American religious practices that are part of tradition" is that there must be an instance.<sup>168</sup>

In explaining its legislative American religious leaders to renewal of ceremonies," the I "the practice of some ceremonial coercion, adverse s

"look[ed] forward" to the Review Comm  
a National Dialogue on Museum/Native A  
*Id.* at 11.

165. See generally 25 U.S.C.A. §§ 300.

166. *Id.* § 3001(3)(B).

167. *Id.* § 3001(3)(C).

<sup>168.</sup> HOUSE REPORT 877, *supra* note 1.

*C. Repatriation: Unassociated Funerary Objects, Sacred Objects, and Items of Cultural Patrimony*

NAGPRA requires museums and federal agencies to repatriate unassociated funerary objects, sacred objects, and items of cultural patrimony pursuant to a four-step process.

1. Identification of the Item

First, the claimant must show that the item claimed is an unassociated funerary object, sacred object, or item of cultural patrimony.<sup>165</sup> “Unassociated funerary object” is defined as an object “reasonably believed to have been placed with individual human remains either at the time of death or later . . . as part of a death rite or ceremony” where the human remains are *not* presently “in the possession or control of” a federal agency or museum, but the object can be related to specific individuals, families, or known human remains, or to a specific burial site of a culturally affiliated individual.<sup>166</sup>

“Sacred objects” are defined as “specific ceremonial objects which are needed by traditional Native American religious leaders for the practice of traditional Native American religions by their present day adherents.”<sup>167</sup> As the House report explains,

[T]he definition of “sacred objects” is intended to include both objects needed for ceremonies currently practiced by traditional Native American religious practitioners and objects needed to renew ceremonies that are part of traditional religions. The operative part of the definition is that there must be “present day adherents” in either instance.<sup>168</sup>

In explaining its legislative “intent . . . to permit traditional Native American religious leaders to obtain such objects as are needed for the renewal of ceremonies,” the House Interior Committee recognized that “the practice of some ceremonies has been interrupted because of governmental coercion, adverse societal conditions or the loss of certain

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“look[ed] forward” to the Review Committee’s recommendations. *Id.* The Report of the Panel for a National Dialogue on Museum/Native American Relations also reflected a division on this issue. *Id.* at 11.

165. See generally 25 U.S.C.A. §§ 3001(3), 3005.

166. *Id.* § 3001(3)(B).

167. *Id.* § 3001(3)(C).

168. HOUSE REPORT 877, *supra* note 108, at 14.

objects through means beyond the control of the tribe at the time.”<sup>169</sup> Significantly, the definition recognizes that the ultimate determination of continuing sacredness must be made by the Native American religious leaders themselves because they must determine the current ceremonial need for the object. Thus, the term *sacred* is not defined explicitly in the legislative definition. Rather the definition will vary according to the traditions of the tribe or community.<sup>170</sup> Of course, a religious leader’s “determination” of sacredness could be challenged on the basis of its “sincerity” just as a First Amendment claim might be similarly challenged.<sup>171</sup> Moreover, the leader cannot simply proclaim that an object is sacred—the object must meet the statutory criteria of having traditional religious significance and future use in a religious ceremony before it can be classified as a “sacred object.”<sup>172</sup>

“Cultural patrimony” is defined as “an object having ongoing historical, traditional, or cultural importance central to the Native American group or culture itself.”<sup>173</sup> Further, the object must have been considered inalienable by the Native American group when the object was separated from such group, rather than property that was owned and transferrable by an individual Native American; thus, tribal law or custom is determinative of the legal question of alienability at the time that the item was transferred.<sup>174</sup> The Senate Committee report, explaining a similar cultural patrimony provision in an earlier version of the NAGPRA bill, indicated that cultural patrimony refers to items of “great importance” such as Zuni war gods or the Wampum belts of the Iroquois.<sup>175</sup>

## 2. Cultural Affiliation and Prior Ownership or Control

Once it has been shown that an item is an unassociated funerary object, sacred object, or item of cultural patrimony, either the cultural affiliation must be determined<sup>176</sup> or, in the case of sacred objects and items of cultural patrimony, the requesting tribe or Native Hawaiian

organization must show controlled by the tribe, organization descendant may also re-an ancestor.<sup>178</sup> If a tribe claim based upon prior opposed to the tribe, the descendants exist or that have failed to make a c

### 3. Right of Possession

The third step in the process which, if standing alone contrary, would support the claim did not have the right of “transfer” of many of such transactions was the impossibility of proving ownership by necessity, may include as documentary evidence the right to possess is entitled access to “recently recovered data” possessed by the claimant as basic facts surrounding the claim.<sup>181</sup>

“Right of possession” means the consent of an individual to determine the circumstances of possession of these . . .

Right of possession is that “an individual may . . . by the transferor.”<sup>184</sup> Au

169. *Id.*

170. SENATE REPORT 473, *supra* note 108, at 6.

171. See, e.g., United States v. Ballard, 322 U.S. 78 (1944); Martinelli v. Dugger, 817 F.2d 1499, 1503 (11th Cir. 1987); United States v. Kuch, 288 F. Supp. 439, 445 (D.D.C. 1968).

172. 25 U.S.C.A. § 3001(3)(C).

173. *Id.* § 3001(3)(D).

174. *Id.*; see also Echo-Hawk, *supra* note 35, at 441-44.

175. SENATE REPORT 473, *supra* note 108, at 7-8.

176. Cultural affiliation can be determined by the summary process, 25 U.S.C.A. §§ 3004, 3005(a)(2), or, in the case of unassociated funerary objects, by the claimant making a showing by a preponderance of the evidence. *Id.* § 3005(a)(4). See *supra* text accompanying notes 140-49 for a discussion of requirements of 25 U.S.C.A. § 3005(a)(4).

177. 25 U.S.C.A. § 3005(a)(5).

178. *Id.* § 3005(a)(5)(A).

179. *Id.* § 3005(a)(5)(C).

180. *Id.* § 3005(c).

181. *Id.* § 3004(b)(2).

182. *Id.* § 3001(13).

183. SENATE REPORT 473, *supra* note 108; *National Policy of Understanding, Native Hawaiians: Human Rights*, (1992).

184. 136 CONG. REC. S17176 (1992).

organization must show that the object was previously owned or controlled by the tribe, organization, or a member thereof.<sup>177</sup> A direct lineal descendant may also request repatriation of a sacred object owned by an ancestor.<sup>178</sup> If a tribe or Native Hawaiian organization is making a claim based upon prior ownership or control by a tribal member, as opposed to the tribe, the claimant must show that no identifiable lineal descendants exist or that the lineal descendants have been notified and have failed to make a claim.<sup>179</sup>

### 3. Right of Possession: Claimant's Prima Facie Case

The third step in the process requires a claimant to present "evidence which, if standing alone before the introduction of evidence to the contrary, would support a finding that the Federal agency or museum did not have the right of possession" of the items.<sup>180</sup> Because the original "transfer" of many of these objects occurred when recordkeeping of such transactions was virtually nonexistent—and because of the near impossibility of proving that a legal document does not exist—evidence, by necessity, may include oral traditional and historical evidence, as well as documentary evidence. In making its prima facie case, the claimant is entitled access to "records, catalogues, relevant studies or other pertinent data" possessed by the federal agency or museum that relate to "basic facts surrounding acquisition and accession" of the items being claimed.<sup>181</sup>

"Right of possession" means "possession obtained with the voluntary consent of an individual or group that had authority of alienation."<sup>182</sup> This term was intended "to provide a legal framework in which to determine the circumstances by which a museum or agency came into possession of these . . . objects."<sup>183</sup>

Right of possession is based upon the general property law principle that "an individual may only acquire the title to property that is held by the transferor."<sup>184</sup> Authority to alienate would be determined by the

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177. 25 U.S.C.A. § 3005(a)(5).

178. *Id.* § 3005(a)(5)(A).

179. *Id.* § 3005(a)(5)(C).

180. *Id.* § 3005(c).

181. *Id.* § 3004(b)(2).

182. *Id.* § 3001(13).

183. SENATE REPORT 473, *supra* note 108, at 8; see also Rennard Strickland, *Implementing the National Policy of Understanding, Preserving, and Safeguarding the Heritage of Indian Peoples and Native Hawaiians: Human Rights, Sacred Objects, and Cultural Patrimony*, 24 ARIZ. ST. L.J. 175 (1992).

184. 136 CONG. REC. S17176 (daily ed. Oct. 26, 1990) (statement of Sen. McCain).

law of the governmental entity having jurisdiction over a transaction.<sup>185</sup> In most cases, the initial transfer of the item out of tribal control would presumably be governed by tribal law or custom.<sup>186</sup> The definition does not apply only in the rare instance when its application would result in a Fifth Amendment taking of private property for a public purpose without just compensation.<sup>187</sup> If there would be a taking within the meaning of the constitutional provision, applicable federal, state, or tribal law would apply.<sup>188</sup> In this rare instance, however, the party asserting a Fifth Amendment taking first would be required to obtain a ruling from the Court of Claims upholding such an assertion before federal, state, or tribal laws would be used to replace the statutory standard.<sup>189</sup> In summary, the definition of "right to possession" is designed to ensure that the object did not pass out of tribal or individual Native American possession without appropriate consent.<sup>190</sup>

#### 4. Right of Possession: Burden of Proof

If the claimant surmounts these three hurdles, the fourth step places a burden upon the museum or agency to prove that it has a right of possession in regard to the items in question.<sup>191</sup> If the museum or agency cannot prove right of possession, the unassociated funerary object, sacred object, or item of cultural patrimony must be returned—unless the scientific study or competing claims exceptions apply.<sup>192</sup>

NAGPRA makes clear that these provisions, as well as those pertaining to human remains and associated funerary objects, are not meant to limit the general repatriation authority of federal agencies and museums.<sup>193</sup> Further, NAGPRA does not preclude agencies or museums from entering into agreements with tribes and organizations regarding any Native American objects owned or controlled by museums or agencies.<sup>194</sup>

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185. See generally 16 Am. Jur. 2d *Conflict of Laws* §§ 43, 44 (1979 & Supp. 1991).

186. See generally Echo-Hawk, *supra* note 35.

187. 25 U.S.C.A. § 3001(13).

188. *Id.*; see also House Report 877, *supra* note 108, at 15; Ralph Johnson & Sharon Haensly, *Fifth Amendment Takings Implications of the 1990 Native American Graves Protection and Repatriation Act*, 24 ARIZ. ST. L.J. 151 (1992).

189. 25 U.S.C.A. § 3001(13).

190. See SENATE REPORT 473, *supra* note 108, at 8.

191. 25 U.S.C.A. § 3005(c).

192. *Id.* § 3005(b), (e). See *supra* text accompanying notes 154-59.

193. 25 U.S.C.A. § 3009(1)(A).

194. *Id.* § 3009(1)(B).

#### D. Inventory: Human

NAGPRA requires museum by-item inventory of human remains. "Inventory" is defined as "a record of information called for by the museum or agency which identifies the affiliation of each item," and "which is kept within its possession."<sup>195</sup> The statute directs the museum to conduct exhaustive studies to conclusively determine . . . .<sup>196</sup> Specifically states that it "shall . . . .<sup>197</sup> The initiation of new scientific study of funerary objects or other scientific information from PRA's intent is merely to determine the affiliation based upon preexisting . . . .

The inventory is to be conducted in accordance with governmental and traditional methods. The inventory must be completed, however, may be granted to tribes to participate in the inventory process. The interactive exchange of information between tribes and organizations and museums is encouraged. Moreover, the inventory process may take actions on repatriation requests identified in the inventory process, not merely after completion of the inventory process, after the completion of the inventory process.

195. *Id.* § 3003(a).

196. *Id.* § 3003(e).

197. *Id.* § 3003(a).

198. SENATE REPORT 473, *supra* note 108.

199. 25 U.S.C.A. § 3003(b)(2).

200. SENATE REPORT 473, *supra* note 108.

201. 25 U.S.C.A. § 3003(b)(1)(A).

202. *Id.* § 3003(b)(1)(B).

203. *Id.* § 3003(c).

204. SENATE REPORT 473, *supra* note 108.

205. 25 U.S.C.A. § 3009(2).

206. SENATE REPORT 473, *supra* note 108.

*D. Inventory: Human Remains and Associated Funerary Objects*

NAGPRA requires museums and federal agencies to complete an item-by-item inventory of human remains and associated funerary objects.<sup>195</sup> "Inventory" is defined as a "simple itemized list that summarizes the information called for by this section."<sup>196</sup> As part of the inventory, the museum or agency is required to "identify the geographical and cultural affiliation of each item," to the extent possible, based upon information within its possession.<sup>197</sup> This provision does *not* "require museums . . . to conduct exhaustive studies and additional scientific research to conclusively determine . . . cultural affiliation."<sup>198</sup> In fact, NAGPRA specifically states that it "shall not be construed to be an authorization for the initiation of new scientific studies of such remains and associated funerary objects or other means of acquiring or preserving additional scientific information from such remains and objects."<sup>199</sup> Rather, NAGPRA's intent is merely to require a good faith effort to identify cultural affiliation based upon presently available evidence.<sup>200</sup>

The inventory is to be conducted in consultation with Native American governmental and traditional leaders and the Review Committee.<sup>201</sup> The inventory must be completed by November 16, 1995.<sup>202</sup> Extensions, however, may be granted by the Secretary of Interior for good cause.<sup>203</sup> Interaction between tribes and museums is expected to occur during the inventory process. The intent of the process is to "allow for the cooperative exchange of information between Indian tribes or Native Hawaiian organizations and museums regarding objects in museum collections."<sup>204</sup> Moreover, the inventory process is not intended to delay any pending actions on repatriation requests.<sup>205</sup> Notice of culturally affiliated objects identified in the inventory is to be provided "throughout the process"—not merely after completion of the entire inventory.<sup>206</sup> Within six months after the completion of the inventory, final notice must be sent to all

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195. *Id.* § 3003(a).

196. *Id.* § 3003(e).

197. *Id.* § 3003(a).

198. SENATE REPORT 473, *supra* note 108, at 12.

199. 25 U.S.C.A. § 3003(b)(2).

200. SENATE REPORT 473, *supra* note 108, at 12.

201. 25 U.S.C.A. § 3003(b)(1)(A), (C).

202. *Id.* § 3003(b)(1)(B).

203. *Id.* § 3003(c).

204. SENATE REPORT 473, *supra* note 108, at 11.

205. 25 U.S.C.A. § 3009(2).

206. SENATE REPORT 473, *supra* note 108, at 12.

tribes that are reasonably believed to be culturally affiliated with human remains or associated funerary objects in the possession or control of the museum or agency.<sup>207</sup>

The notice shall include information about the circumstances surrounding the acquisition of each identified item and information about cultural affiliation.<sup>208</sup> NAGPRA broadly intends that all potential tribal claimants, including Native Hawaiian organizations, receive notice.<sup>209</sup> A tribe or Native Hawaiian organization that receives, or should have received, notice may request additional background information from the museum or agency relevant to the "geographical origin, cultural affiliation and basic facts surrounding [the item's] acquisition and accession."<sup>210</sup> The requirement to perform the inventory is not made contingent upon a museum receiving federal funds.<sup>211</sup>

#### *E. Summary: Unassociated Funerary Objects, Sacred Objects, and Items of Cultural Patrimony*

NAGPRA requires that federal agencies and museums summarize their collections of unassociated funerary objects, sacred objects, and items of cultural patrimony.<sup>212</sup> The summary is "in lieu of an object-by-object inventory" and requires the museum or agency to "describe the scope of the collection, kinds of objects included, reference to geographical location, means and period of acquisition and cultural affiliation, where readily ascertainable."<sup>213</sup>

The museum or agency has three years to compile the summary.<sup>214</sup> After the summary is completed—and presumably during its compilation—a consultation process with Native American governmental and traditional leaders is to occur.<sup>215</sup> As with the inventory process, the summary process is not meant to delay action on pending repatriation requests.<sup>216</sup> The House committee expressed its hope and expectation that the summary would lead to "open discussions" between tribes, museums,

207. 25 U.S.C.A. § 3003(d)(1), (2).

208. *Id.* § 3003(d)(2).

209. *See supra* text accompanying note 144.

210. 25 U.S.C.A. § 3003(b)(2); *see also supra* text accompanying notes 143-46.

211. 25 U.S.C.A. 3008(b) permits, but does not require, the Secretary of Interior to make grants to museums to conduct the inventory and summary required by the Act. *See infra* text accompanying notes 263-65.

212. 25 U.S.C.A. § 3004; *see also supra* text accompanying notes 166-75 for the definitions of these items.

213. 25 U.S.C.A. § 3004(a), (b)(1)(A).

214. *Id.* § 3004(b)(1)(C).

215. *Id.* § 3004(b)(1)(B), (C).

216. *Id.* § 3009(2).

and federal agencies.<sup>217</sup> Organizations are entitled to cultural affiliation, acq

#### *F. Tribal Owners*

NAGPRA expressly provides for the disposition of cultural items<sup>218</sup> that land.<sup>219</sup> In the case of any lineal descendants<sup>220</sup> If lineal descendants objects cannot be ascertained, and item

1. The tribe or Native American organization that has disposition of all cultural items on land is defined to include a reservation, all lands administered for Native Americans under the Commission Act of 1908, and the Bill.<sup>223</sup>

2. In the case of federal lands, the consultation with the closest tribe or nation that has title or control.<sup>224</sup> If there is no tribe or nation that has title or control, the mediator of the dispute may determine that the disputed items could be returned to the tribe or nation that has title or control.

3. If cultural affiliation cannot be ascertained, the tribe or nation that has title or control of the disputed items may be entitled to a final judicial determination or United States Court of Appeals.

217. HOUSE REPORT 877, sub H.R. 3004, at 1 (1990).

218. 25 U.S.C.A. § 3004(b).

219. NAGPRA defines cultural items as funerary objects, sacred objects, and objects of religious significance.

220. *Id.* § 3002.

221. *Id.* § 3002(a)(1).

222. *Id.* § 3002(a)(2)(A).

223. *Id.* § 3001(15).

224. *Id.* § 3002(a)(2)(B). Native American organizations that have title or control of the disputed items may be entitled to a final judicial determination or United States Court of Appeals.

225. SENATE REPORT 473, sub S. 1000, at 1 (1990).

and federal agencies.<sup>217</sup> Upon request, all tribes and Native Hawaiian organizations are entitled to obtain data pertaining to geographical origin, cultural affiliation, acquisition, and accession of these objects.<sup>218</sup>

#### F. Tribal Ownership and Control: Imbedded Cultural Items

NAGPRA expressly provides rules that address ownership or control of cultural items<sup>219</sup> that are discovered in the future on federal and tribal land.<sup>220</sup> In the case of human remains and associated funerary objects, any lineal descendants have the initial right of ownership or control.<sup>221</sup> If lineal descendants of the human remains and associated funerary objects cannot be ascertained or when unassociated funerary objects, sacred objects, and items of cultural patrimony are involved, ownership or control is determined in the following statutory order of priority:

1. The tribe or Native Hawaiian organization owns or controls the disposition of all cultural items discovered on tribal land.<sup>222</sup> Tribal land is defined to include all lands within the exterior boundaries of a reservation, all dependent Indian communities, and any lands administered for Native Hawaiians pursuant to the Hawaiian Homes Commission Act of 1920, as amended, and the Hawaii Statehood Bill.<sup>223</sup>
2. In the case of federal land, the tribe or Native Hawaiian organization with the closest cultural affiliation to the items has ownership or control.<sup>224</sup> If there is a dispute between tribes, NAGPRA contemplates that the statutorily-created Review Committee may serve as a mediator of the dispute, and that agreements between tribes regarding disputed items could occur.<sup>225</sup>
3. If cultural affiliation of the items cannot be established, but the objects are discovered on aboriginal land that has been the subject of a final judicial determination by the Indian Claims Commission or United States Court of Claims, the tribe that has obtained the

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217. HOUSE REPORT 877, *supra* note 108, at 15.

218. 25 U.S.C.A. § 3004(b)(2).

219. NAGPRA defines cultural items to include human remains, associated and unassociated funerary objects, sacred objects, and items of cultural patrimony. *See id.* § 3001(3).

220. *Id.* § 3002.

221. *Id.* § 3002(a)(1).

222. *Id.* § 3002(a)(2)(A).

223. *Id.* § 3001(15).

224. *Id.* § 3002(a)(2)(B). NAGPRA defines "Federal lands" as non-tribal land "controlled or owned by the United States, including lands selected by but not yet conveyed to Alaska Native corporations and groups pursuant to the Alaska Native Claims Settlement Act of 1971." *Id.* § 3001(5).

225. SENATE REPORT 473, *supra* note 108, at 9.

judgment has the right of ownership and control over the items, unless another tribe can show a stronger cultural relationship.<sup>226</sup>

The Secretary of the Interior is authorized to promulgate regulations pertaining to the disposition of cultural items unclaimed under this section in consultation with the Review Committee, Native American groups, museums, and scientists.<sup>227</sup>

Whenever a party intends to intentionally excavate cultural items for any purpose, that party must obtain a permit pursuant to the Archeological Resources Protection Act of 1979.<sup>228</sup> If tribal lands are involved, the items may be excavated only after notice to and consent of the tribe or Native Hawaiian organization.<sup>229</sup> If federal lands are involved, the items may be excavated only after notice and consultation with the appropriate tribe or Native Hawaiian organization.<sup>230</sup> As described previously, the tribe or Native Hawaiian organization retains ownership or control over remains and objects unearthed on lands covered by this provision.<sup>231</sup>

If imbedded cultural items have been inadvertently discovered as part of another activity, such as construction, mining, logging, or agriculture, the person who has discovered the items must temporarily cease activity and notify the responsible federal agency in the case of federal land or the appropriate tribe or Native Hawaiian organization in the case of tribal land.<sup>232</sup> When notice is provided to the federal agency, that agency has the responsibility to promptly notify the appropriate tribe or Native

226. 25 U.S.C.A. § 3002(a)(2)(C).

227. *Id.* § 3002(b).

228. *Id.* § 3002(c)(1); 16 U.S.C. §§ 470aa-mm (1988 & West Supp. 1991). A permit may be issued pursuant to the Archeological Resources Protection Act of 1979 ("ARPA") upon a showing that the applicant is qualified; the undertaking is designed to advance archaeological knowledge in the public interest; the resources will remain the property of the United States and be preserved in an appropriate institution (this is modified by the NAGPRA); and the activity is consistent with the applicable land management plan. 16 U.S.C. § 470cc(b) (1988). Notice must be provided to tribes which may consider a site of religious or cultural importance. *Id.* § 470cc(c). Tribal consent is required for excavations located on tribal land. *Id.* § 470cc(g)(2). NAGPRA expands upon these requirements only marginally. NAGPRA requires notice to tribes with an aboriginal claim to the land. Notice is not limited to sites that are specifically of religious or cultural importance as under ARPA. Moreover, NAGPRA specifically requires consultation with the appropriate tribes if excavation involves culturally affiliated material or if it occurs on Federal land that has been the subject of adjudicated aboriginal claims. ARPA speaks only to notice, not consultation, although the regulations allow (but do not require) "discussions" with interested tribes. Compare 25 U.S.C.A. § 3002(c)(2), (3) with 16 U.S.C. § 470cc(c) and 43 C.F.R. § 7.7 (1990).

229. See 25 U.S.C.A. § 3002(c)(2).

230. See *id.*

231. *Id.* § 3002(c); see also text accompanying notes 222-26.

232. 25 U.S.C.A. § 3002(d)(1). In the case of Alaska Native Claims Settlement Act lands (still owned by the Federal government) selected by, but not conveyed to, the Alaska Native corporation or group, that corporation or group is the appropriate organization to be notified. *Id.*

Hawaiian organization.<sup>233</sup> process whereby Indian tri an opportunity to intervene lands to safeguard Native sacred objects or objects o

If there is inadvertent organizations are afforded appropriate disposition of may resume thirty days af department or the Indian certifies that notice has be may delegate their respons of Interior.<sup>237</sup> Ownership a are governed by the provis

#### G. Proh

NAGPRA prohibits all tr for sale or profit except for or otherwise obtained with kin or the official governing Indian tribe or Native Ha intended to prevent traffick acquired, regardless of wh moved prior to the enactm a fine of up to \$100,000 a first offense; subsequent vi to \$250,000 and a maximum

NAGPRA also prohibits in violation of the act.<sup>242</sup> F the same as for trafficking provision, as it applies to f

233. See SENATE REPORT 473, sup

234. *Id.*; see also 136 CONG. REC.

235. *Id.*

236. 25 U.S.C.A. § 3002(d)(1).

237. *Id.* § 3002(d)(3).

238. *Id.* § 3002(d)(2).

239. *Id.* § 3001(13); 18 U.S.C.A.

240. SENATE REPORT 473, supra n

241. 18 U.S.C.A. § 1170(a).

242. *Id.* § 1170(b).

243. *Id.*; see also supra text accom

Hawaiian organization.<sup>233</sup> The intent of this provision is to "provide a process whereby Indian tribes and Native Hawaiian organizations have an opportunity to intervene in development activity on Federal or tribal lands to safeguard Native American human remains, funerary objects, sacred objects or objects of cultural patrimony."<sup>234</sup>

If there is inadvertent discovery, Indian tribes or Native Hawaiian organizations are afforded thirty days to make a determination as to the appropriate disposition of the human remains and objects.<sup>235</sup> Activity may resume thirty days after the Secretary of the appropriate federal department or the Indian tribe or the Native Hawaiian organization certifies that notice has been received.<sup>236</sup> Federal department secretaries may delegate their responsibilities under this provision to the Secretary of Interior.<sup>237</sup> Ownership and control of items inadvertently discovered are governed by the provisions described previously.<sup>238</sup>

#### *G. Prohibitions Against Trafficking*

NAGPRA prohibits all trafficking in Native American human remains for sale or profit except for remains that have been "excavated, exhumed or otherwise obtained with full knowledge and consent of the next of kin or the official governing body of the appropriate culturally affiliated Indian tribe or Native Hawaiian organization."<sup>239</sup> The prohibition is intended to prevent trafficking in human remains that were wrongfully acquired, regardless of when and where obtained, including those removed prior to the enactment of NAGPRA.<sup>240</sup> Violators are subject to a fine of up to \$100,000 and face up to a one year jail sentence for a first offense; subsequent violations subject the offender to a fine of up to \$250,000 and a maximum of five years in jail.<sup>241</sup>

NAGPRA also prohibits trafficking in other cultural items obtained in violation of the act.<sup>242</sup> Penalties for violation of this prohibition are the same as for trafficking in human remains.<sup>243</sup> The anti-trafficking provision, as it applies to funerary objects, sacred objects, and items of

233. See SENATE REPORT 473, *supra* note 108, at 10.

234. *Id.*; see also 136 CONG. REC. S17176 (daily ed. Oct. 26, 1990) (statement of Sen. McCain).

235. *Id.*

236. 25 U.S.C.A. § 3002(d)(1).

237. *Id.* § 3002(d)(3).

238. *Id.* § 3002(d)(2).

239. *Id.* § 3001(13); 18 U.S.C.A. § 1170(a) (West Supp. 1991).

240. SENATE REPORT 473, *supra* note 108, at 11.

241. 18 U.S.C.A. § 1170(a).

242. *Id.* § 1170(b).

243. *Id.*; see also *supra* text accompanying note 241.

cultural patrimony is for prospective acquisitions only.<sup>244</sup> The prospective limitation, however, does not prevent the application of existing state or federal law involving theft or stolen property if relevant to the possession or sale of Indian cultural items.<sup>245</sup>

#### H. Review Committee

NAGPRA creates a Review Committee, appointed by the Secretary of Interior, to monitor and review the implementation of NAGPRA.<sup>246</sup> The Review Committee consists of seven members—three appointed by the Secretary from nominations submitted by Indian tribes, Native Hawaiian organizations, and traditional Native American religious leaders (at least two of the three must be traditional Native American religious leaders); three appointed from nominations submitted by national museum and scientific organizations; and one person chosen from a list compiled by the other six members.<sup>247</sup> Federal officers and employees may not serve on the Review Committee.<sup>248</sup>

The Review Committee composition and nomination process differ from that of the National Museum of the American Indian Act special review committee, which has been heavily criticized as being biased in favor of archaeological interests.<sup>249</sup> NAGPRA seeks to secure a more diverse composition.<sup>250</sup>

The Review Committee's function is to:

- (1) monitor the inventory and identification process;<sup>251</sup>
- (2) upon request, make findings related to the cultural affiliation and return of cultural items, and facilitate the resolution of disputes between interested parties;<sup>252</sup> these findings are non-binding, but are admissible in any court proceeding filed pursuant to NAGPRA;<sup>253</sup>

244. See *id.*

245. 25 U.S.C.A. § 3009(5).

246. *Id.* § 3006(a). NAGPRA required that the Review Committee be appointed by March 16, 1991. *Id.* The Secretary did not meet this deadline. In fact, a notice in the Federal Register soliciting nominations to the Review Committee was not published until August 28, 1991. 56 Fed. Reg. 42635 (1991). The Committee's initial six members were not appointed until March 3, 1992, and as of the date of this article, the seventh member had yet to be chosen. The Review Committee ceases existence 120 days after the Secretary certifies that its work has been completed. 25 U.S.C.A. § 3006(i).

247. 25 U.S.C.A. § 3006(b)(1).

248. *Id.* § 3006(b)(2).

249. See, e.g., *Senate Hearing on S. 1021 & S. 1980, supra* note 8, at 79 (testimony of Suzan Shown Harjo, Director, Morningstar Foundation).

250. In the Museum of the American Indian Act, three of the five special review committee members are selected from nominations of Indian tribes and organizations. The members, however, are neither required to be Native American, nor traditional leaders. 20 U.S.C.A. § 80q-10(b) (1990).

251. 25 U.S.C.A. § 3006(c)(2).

252. *Id.* § 3006(c)(3), (4).

253. *Id.* § 3006(d); see also SENATE REPORT 473, *supra* note 108, at 13.

- (3) compile an inventory of cultural items and make recommendations as to their disposition;<sup>254</sup>
- (4) consult with the Secretary to develop regulations to implement NAGPRA;
- (5) make recommendations as to the disposition of items;<sup>255</sup> and
- (6) submit an annual report to the Secretary.

#### I. Enforcement and Penalties

NAGPRA provides for the Secretary to file a civil action against museums that do not comply with its provisions. The penalties are determined by the commercial value of the item in question and the damages suffered by an aggrieved party.<sup>256</sup>

The penalty provision is not limited to violations of NAGPRA. Any aggrieved party can allege a violation of NAGPRA and seek injunctive relief to enforce NAGPRA's provisions and any necessary orders.<sup>257</sup> This action can be brought under procedural or substantive legal rights of Indian tribes and organizations.<sup>258</sup> If a museum repatriates items in good faith, it is not liable for claims against it for repatriation, breach of fiduciary law,<sup>259</sup>

To facilitate implementation, the Secretary of the Interior to make grants to museums to assist them in their summary.<sup>260</sup> Tribes and Native Hawaiians are entitled to receive grants.

254. 25 U.S.C.A. § 3006(c)(5); see also SENATE REPORT 473, *supra* note 108, at 13.

255. 25 U.S.C.A. § 3006(c)(7).

256. *Id.* § 3006(c)(9).

257. *Id.* § 3006(h).

258. *Id.* § 3007.

259. *Id.* § 3007(b).

260. *Id.* § 3013. The language in the NAGPRA statute is identical to the language used to enforce the law's provisions. The Senate Report states that the language "is intended to include an Indian tribe, Native Hawaiian organization, or other entity." SENATE REPORT 473, *supra* note 108, at 13.

261. 25 U.S.C.A. § 3009(3), (4).

262. *Id.* § 3005(f).

263. *Id.* § 3008(b).

- (3) compile an inventory of culturally unidentifiable human remains and make recommendations as to an appropriate process for their disposition;<sup>254</sup>
- (4) consult with the Secretary of the Interior in the development of regulations to implement NAGPRA;<sup>255</sup>
- (5) make recommendations as to the future care of repatriated cultural items;<sup>256</sup> and
- (6) submit an annual report to Congress.<sup>257</sup>

### *I. Enforcement and Implementation of NAGPRA*

NAGPRA provides for the Secretary of Interior to assess civil penalties against museums that do not comply with NAGPRA.<sup>258</sup> The amount of the penalties are determined by (1) the archaeological, historical, or commercial value of the item involved; (2) economic and noneconomic damages suffered by an aggrieved party; and (3) the number of violations.<sup>259</sup>

The penalty provision is not meant to be an exclusive remedy for violations of NAGPRA. NAGPRA specifically provides that an aggrieved party can allege a violation of NAGPRA through a legal cause of action to enforce NAGPRA's provisions. Federal courts have authority to issue any necessary orders.<sup>260</sup> This action is in addition to any existing procedural or substantive legal rights secured to tribes or Native Hawaiian organizations.<sup>261</sup> If a museum repatriates an item in good faith, however, it is not liable for claims against it predicated upon a claim of wrongful repatriation, breach of fiduciary duty, public trust, or violations of state law.<sup>262</sup>

To facilitate implementation, NAGPRA authorizes the Secretary of Interior to make grants to museums to undertake the inventory and the summary.<sup>263</sup> Tribes and Native Hawaiian organizations may also receive

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254. 25 U.S.C.A. § 3006(c)(5); *see also* text accompanying notes 161-64.

255. 25 U.S.C.A. § 3006(c)(7).

256. *Id.* § 3006(c)(9).

257. *Id.* § 3006(h).

258. *Id.* § 3007.

259. *Id.* § 3007(b).

260. *Id.* § 3013. The language in the NAGPRA is that "any person" may bring an action to enforce the law's provisions. The Senate Report explains this provision as meaning that "any party; including an Indian tribe, Native Hawaiian organization, museum or agency" may bring a cause of action. SENATE REPORT 473, *supra* note 108, at 14.

261. 25 U.S.C.A. § 3009(3), (4).

262. *Id.* § 3005(f).

263. *Id.* § 3008(b).

grants to assist them in repatriating cultural items.<sup>264</sup> Unfortunately, Congress failed to appropriate any funding under these provisions in 1991.<sup>265</sup> Because sufficient funding is critical to completely fulfill the promise of NAGPRA, funds hopefully will be made available for these purposes in future fiscal years. Finally, the Secretary of the Interior is authorized to issue regulations by November 16, 1991, to carry out NAGPRA's provisions.<sup>266</sup>

## VI. CONCLUSION

After centuries of discriminatory treatment, the Native American Graves Protection and Repatriation Act finally recognizes that Native American human remains and cultural items are the remnants and products of living people, and that descendants have a cultural and spiritual relationship with the deceased. Human remains and cultural items can no longer be thought of as merely "scientific specimens" or "collectibles."

In interpreting NAGPRA, it is critical to remember that it must be liberally interpreted as remedial legislation to benefit the class for whom it was enacted. This article, hopefully, will aid in the interpretation of NAGPRA in a manner consistent not only with the words of the statute, but also its spirit.

This article was also written to remind people that NAGPRA is a part of a larger historical tragedy: the failure of the United States Government, and other institutions, to understand and respect the spiritual and cultural beliefs and practices of Native people. Governmental policies that threaten Native American religions are not merely historical anachronisms, but continue to have a devastating impact upon contemporary Native Americans. Sites sacred to traditional Indian religious practitioners are currently threatened with destructive development. Centuries-old religious peyote use is threatened by ethnocentric court decisions. Native American prisoners are unable to practice their religions in a manner comparable to the respect accorded Judeo-Christian religious practice. Legislation to address this religious discrimination will be considered by Congress in the near future.

NAGPRA is unique legislation because it is the first time that the Federal Government and non-Indian institutions must consider what is *sacred* from an Indian perspective. Future legislation must be imbued with this same heightened consciousness of the nature of Indian culture

and spirituality. The authors hope that the recognition of the cultural and moral outrage that gave rise to NAGPRA will likewise result in across-the-board recognition of the importance of Native American religions—which were suppressed during the last decade of the Twentieth Century.

264. *Id.* § 3008(a).

265. See H.R. 2686, 102d Cong., 1st Sess. (1991).

266. 25 U.S.C.A. § 3011. This deadline has not been met.

and spirituality. The authors hope that the understanding, sensitivity, and moral outrage that gave rise to and is reflected in NAGPRA will likewise result in across-the-board protection and respect for traditional Native American religions—which continue to be under assault in the last decade of the Twentieth Century.