



March 12, 2020

Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Room 1A Washington, DC 20426

RE: Goldendale Energy Storage Project, FERC No. 14861

Comments by Columbia Riverkeeper and Friends of the White Salmon River on the Draft License Application dated December 13, 2019.

Dear Secretary Bose,

Columbia Riverkeeper (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 health, salmon, and other fish and wildlife. We have actively engaged in Rye Development's (Applicant) proposed Goldendale Energy Storage Project (Project) since 2017.

Friends of the White Salmon River¹ is a non-profit 501(c)(3) organization that has worked since 1976 to protect and restore naturally-reproducing anadromous fish populations, and to protect the shorelines, water resources, and habitat areas that affect wild salmonid populations within Klickitat County. Friends of the White Salmon River has an interest in protecting and conserving water resources affecting wild salmonid populations.

Riverkeeper would like to incorporate by reference the following comments submitted by the U.S. Fish and Wildlife Service (USFWS) on March 3, 2020, and American Rivers, et al on March 12, 2020. Please find both comments attached as Appendix 1 and 2 for reference.

Riverkeeper provides the following comments in response to Applicant's December 13, 2019, filing of the Project's (FERC No. 14861) Draft License Application for an Original License (DLA).

¹ Commenters will be referred to as "Riverkeeper" throughout this comment.

The DLA is incomplete and precludes any meaningful comment. To the extent that it can, Riverkeeper submits the following comments pursuant to 18 C.F.R. § 5.16(e).

1. The DLA is patently incomplete and undermines the ILP; it should be rejected.

Riverkeeper requests that FERC reject the Applicant's Project DLA as deficient or patently deficient. 18 C.F.R. § 5.20, See §§ 5.16(e) (comment on DLA), § 5.18(a)(4)(i)-(ii)) (DLA must be notarized), § 5.18(a)(5)(ii) and § 4.41(e) (license for a major unconstructed project and a major modified project, § 5.21 (additional information), § 5.27(amendment of application).

The DLA is patently incomplete because it fails to include certain "Application Requirements" pursuant to § 5.18. The Applicant elected to file a draft license application in lieu of a preliminary license proposal. § 5.16(c) ("A potential applicant may elect to file a draft license application which includes the contents of a license application required by §5.18 instead of the Preliminary Licensing Proposal."). A draft license must include all application requirements as delineated in § 5.18.

a. The DLA is not Notarized as Required by § 5.18(a)(4)(i)-(ii).

The Project's DLA fails to contain a notarized signature as required by § 5.18(a)(4)(i)-(ii). The purpose of this requirement is to verify that the person filing the application verified under oath, to the best of their knowledge that the facts alleged in the application are true. Failure to contain a notarized signature puts little faith into the trustworthiness of the application as a whole. This combined with the misspelling of one of the tribes that the applicant is "consulting" with, further exacerbates the overall lack of transparency and trustworthiness surrounding the project as a whole. ² Riverkeeper cannot comment on a project application that fails to verify that the facts contained in the application are true.

b. Exhibit A lacks Substantive Information about System and Regional Power Needs.

Exhibit A of the DLA is a description of the project. § 4.4.1(b). As part of this description, the Applicant must include "a statement of system and regional power needs and the manner in which the power generated at the project is to be utilized, including the amount of power to be used on-site, if any." § 4.4.1(b)(5). The applicant provides the Project's estimated "annual generation for 8 hours a day, 7 days a week" as 3,500gigawatt-hours." It also provides the estimates for the maximum discharge of water within the project. However, this section does not discuss: (1) the regional power needs, (2) how the power produced by the project will be utilized, (3) if any of that power will be used on site, and (4) the amount of power estimated to be sold and who potential purchasers are. Such

² See, DLA Initial Statement P. iv (spelling Confederated Bands and Tribes of the Yakama Nation, as "Yakima."). Riverkeeper pointed out this misspelling in our February 28, 2019, comments and Rye Development still failed to correct it, showing little respect for the tribal nation they are supposed to consult with.

³ DLA, Exhibit A, P. 11, section 6.

information is required to be included in the description of the project. § 4.4.1(b)(5)(i)-(iii). Generalized estimates of maximum capacity, mean little without a detailed discussion of regional power needs. Therefore, Exhibit A is insufficient.

c. The DLA is Missing Exhibit D as Required by § 5.18(a)(5)(ii) and § 4.41(e).

The Project DLA fails to contain an Exhibit D as required by § 5.18(a)(5)(ii) and § 4.41(e). "Exhibit D is a statement of project costs and financing," and must include all requirements in § 4.41(e)(1)-(10). The Applicant does not present the required Project costs and financing for the project, yet their application claims that "the Goldendale Energy Storage Project could save regional ratepayers hundreds of millions of dollars annually in cost savings and revenue."4 Without the information required in Exhibit D, it is nearly impossible for stakeholders to provide meaningful and comprehensive comments. Riverkeeper and other stakeholders have serious concerns about the financial viability of the Project and how the proposed hydropower project fits into the West Coast wholesale energy markets, which will be discussed in more detail in Section 4.b of this comment. The Applicant's failure to include a statement of Project costs and financing further exacerbates these concerns.

2. Accepting the Current DLA Undermines the Integrated License Application Process.

Failure to allow meaningful comment on a complete DLA undermines the Integrated Licensing Process (ILP). Section 5.16(c) provides the right to comment on the DLA. Such comment is the ultimate step of the pre-filing process. Through commenting, stakeholders' input substantively shapes the final application and its proposed environmental measures and narrows or resolves issues for the post-application process. Of even greater importance, the DLA comment is the final opportunity for stakeholders to comment directly to the application, and where the applicant must respond to stakeholder comments. This critical step of the ILP will be lost if stakeholders are not provided the opportunity to file supplemental comments on a complete DLA.

When applicants elect to file a DLA it may help expedite Commission processing of the final license application by identifying application deficiencies early. However, this process is undermined when the DLA is missing required components. ⁵ The inability to comment on a complete DLA sets the stage for dispute over whether a final application would be complete.

3. The DLA Should Be Rejected

FERC should reject the Applicant's Project DLA based on a number of deficiencies. Section 5.20. Section 5.20(a)(1) states:

> If an applicant believes that its application conforms adequately to the pre-filing consultation and filing requirements of this part without

⁴ See DLA Cover Letter.

⁵ Protection, Mitigation, and Enhancement Measures, Settlements and Draft License Application, https://www.ferc.gov/industries/hydropower/gen-info/licensing/ilp/ilp-tutorial/prepare/draft-license/protect-a pp.asp.

containing certain required materials or information, it must explain in detail why the material or information is not being submitted and what steps were taken by the applicant to provide the material or information.

The DLA does not state why it did not include a notarized signature, why it failed to include Exhibit D, nor why the Project description lacks information. Failure to allege under oath to the accuracy of facts contained in the application, failure to include a statement on Project costs and financing, and a failure to adequately discuss the system and region power needs disallows meaningful comment on the DLA and undermines the ILP process. As such the process cannot move forward in any meaningful way. Section 5.20 provides a process for assuring timely correction of the definicenices and should be applied here.

4. Riverkeeper General Comments

a. Comments on Specific Exhibits and Appendices in the DLA.

Exhibit A—Description of the Project § 4.41(b) and Exhibit B—Project Operation and Resource Utilization § 4.41(c). The DLA describes the Project as a closed-loop pumped storage hydropower facility utilizing initial fill water and periodic make-up water purchased from Public Utility District No. 1 of Klickitat County, Washington (KPUD) using a KPUD-owned conveyance system and municipal water right. The KPUD water right draws water directly from the Columbia River. The DLA estimates that the initial fill for the Project will be 9,000 Acre Foot (AF) with the total annual refill volume (make up water due to evaporation and leakage) of 370 AF. These estimates seriously question the basic assertion that this Project is closed-loop. One-acre foot of water equals 326,000 gallons of water. This means that the initial fill for this project will use 2.93 million gallons of water and periodic make-up is estimated to use over 1.2 million gallons of water per year from the Columbia River. Depending on over 1.2 million gallons of water per year from the Columbia seems to contradict the Project being an entirely closed-loop project, it seems dependent on the River to account for evaporation and leakage. Failure to account for the massive amounts of water needed from the Columbia for this project fails to adequately consider the stresses this project will place on an already impaired river with multiple Endangered Species Act (ESA) listed species.

In addition to questioning the claim that this Project is closed-loop, the reservoirs have other water quality issues that the DLA fails to address. For example, Table 3.3-1 in the DLA, estimates the annual loss of water from the reservoir due to evaporation as 420 AF. per year. As the USFWS Comment points out, "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." Another issue left unexplored in the DLA is the impacts of the Project's turbines on water quality within the reservoir. The DLA states that water in the reservoirs

⁶ See DLA, Exhibit A, p. 3-4, Section 1.3.

⁷ See Water Education Foundation, What's An Acre Foot, available at https://www.watereducation.org/general-information/whats-acre-foot.

⁸ U.S. Fish and Wildlife Services Comment on the draft License Application Goldendale Energy Storage Project, FERC Project No. 14861 (2020) p. 5.

will be pumped through Francis type turbines in order to generate energy. Typical Francis type turbines contain wicket gates to control the amount of water flow. The wicket gate bearings are lubricated with grease or another lubricant which is continuously fed into bearings and discharged into water passing through the turbines. The DLA does not discuss the greases, oils, and other lubricants used in the Project's turbines or the effects that these substances could have on reservoir water quality. The DLA also fails to discuss a plan or process for re-lubricating wicket gates in the turbines, how many wicket gates there are, or a spill plan if oil spills either into the reservoirs or onto the soil.

While the Applicant has proposed an operational adaptive water quality monitoring and management program, there is no apparent implementing plan in the DLA containing specific, enforceable measures. Riverkeeper echoes the USFWS's recommendation that the applicant develop and implement a reservoir water quality monitoring and management plan to ensure the water is safe for wildlife resources.

<u>Exhibit E—Environmental Report; Report on water use and quality § 4.41(f)(2)(iv). (v)</u>. Threats facing the Columbia River are severe by any measure. In fact, the vast majority of rivers and streams in Washington fail to meet basic state water quality standards for pollutants such as toxics and temperature. Water quality standards are designed to protect designated uses, including aquatic life, fishing, swimming, and drinking water.

The Applicant fails to discuss the impacts to water quality expected during construction and operation as required by this section. The arid temperature of the Project area means that large quantities of dust can be reasonably expected during construction and operation from sources such as: excavation and digging equipment operation, construction and employee vehicles, etc. The applicant fails to discuss how these activities may increase turbidity in the Columbia River as a result. Turbidity, caused by high sediment levels in the water can lead to harmful bacterial growth that impair recreational activities like swimming and water sports. Turbidity can also block sunlight reaching lower parts of the creek thereby reducing the amount of dissolved oxygen in the water, harming salmon and other aquatic life. This section of the DLA also fails to provide a description of Best Management Practices (BMPs) and measures recommended by Federal and State agencies and the applicant to prevent increases to turbidity or an explanation as to why the applicant rejects these measures. Riverkeeper recommends that these be added.

<u>Exhibit E—Environmental Report; Report on fish, wildlife, and botanical resources § 4.41(f)(3).</u> This section must include a description of the anticipated impacts on fish, wildlife, and botanical resources and any impacts on the human utilization of these resources. § 4.41(f)(3)(ii). The

https://ecology.wa.gov/Water-Shorelines/Water-quality/Water-improvement/Assessment-of-state-waters-3 03d).

⁹ See Columbia River Basin State of the River Report for Toxics, Environmental Protection Agency, Region 10 (January 2009) (available online at:

https://www.epa.gov/columbiariver/2009-state-river-report-toxics).

¹⁰ See State of Washington 303(d) List (available online at:

Confederated Tribes and Bands of the Yakama Nation's (Yakama Nation) comments on the Applicants' Notification of Intent and Pre-Application Document for the Project, filed on February 21, 2019, states: "the proposed project Area of Potential Effect (APE) is within the Ceded Area of the Yakama Nation pursuant to the Treaty of 1855 (12 stat., 951) and is the Supreme Law of the Land pursuant to Article 6 of the U.S. Constitution (i.e. Supremacy Clause)." Yet, the DLA does not discuss how the proposed project will impact Treaty-guaranteed tribal hunting, fishing, and gathering rights in the area, in fact, the DLA fails to make any mention of the Treaty of 1855. Riverkeeper recommends the Applicant conduct additional consultation with tribal resource agencies to determine the effects of this Project on treaty guaranteed rights in the proposed Project area and include them in the DLA or explain that there are no Treaty-guaranteed rights in this area.

Riverkeeper also echoes USFWS' recommendation that, in addition to monitoring golden eagle and bald eagle nests, the Applicant monitors all prairie falcon nests in the project area.¹²

The DLA provides that "all temporarily distrubed areas will be revegetated as outlined in the VMMP."¹³ The applicant however fails to provide "a map or drawing showing, by the use of shading or crosshatching or other symbols, the identity and location of any proposed measures," as required by § 4.41(f)(3)(iv)(F). A visual map of proposed mitigation measures would greatly assist stakeholders in seeing the areas of potential disruption and get a better sense for size and scale of the environmental impacts, Riverkeeper recommends that such a map be added.

Exhibit E—Environmental Report and Appendix G; Report on Historic and Archaeological Resources §4.41(f)(4) and Historic Properties Management Plan. Riverkeeper has serious concerns with: (1) the lack of good faith exhibited by the Applicant in "consultation" with tribal nations, and (2) the overall disregard for the cultural resource issues impacted by the Project, as described by the Yakama Nation in a letter to FERC sent on February 21, 2019, in the Cultural Resources Survey Report, and in other archaeological resources studies conducted at the site.

14 Riverkeeper also has concerns over the DLA's Historic Properties Management Plan's ability to (1) adequately protect cultural resources prior to them being damaged and (2) protect cultural resources once they are discovered. As such, Riverkeeper finds the Plan grossly insufficient.

Contracting with Yakama Nation to survey the Area of Potential Effect (APE) in July 2019 resulted in the recommendation that avoidance should occur for all historic tribal sites within the proposed project area. As Yakama Nation clearly stated in their comment, "Only the

¹¹ See Yakama Nation Comment on Notification of Intent and Pre-Application Document for the Goldendale Energy Storage Project, FERC No. 14861. Filed on February 21, 2019. P. 1.

¹² U.S. Fish and Wildlife Services Comment on the draft License Application Goldendale Energy Storage Project, FERC Project No. 14861 (2020) p. 6.

¹³ See DLA, Exhibit E, p. 67, Section 3.3.3.

¹⁴ See generally Yakama Nation Comment on Notification of Intent and Pre-Application Document for the Goldendale Energy Storage Project, FERC No. 14861. Filed on February 21, 2019.

Yakama Nation can determine what is significant to the Tribe." Yet, the DLA fails to include a "description of the likely direct and indirect impacts of proposed project construction or operation on sites," and "a management plan for the avoidance of, or mitigation of, impacts on historic or archaeological sites and resources based on recommendations." § 4.41(f)(4)(iv)(v). The DLA itself states that, "the potential for impacts to archaeological resources and TCPs [Traditional Cultural Properties] will be further defined during the licensing process and tribal consultation." This is not sufficient. The Applicant has been made aware of TCPs and archaeological sites in the area, the presence of multiple sites in the area combined with Yakama Nation's recommendation to avoid all historical tribal sites should be indication enough that this site is not appropriate for this project. Riverkeeper further echos American Rivers' comment and sentiment that:

We do not believe that non-avoidance measures like minimization or mitigation are appropriate for these culturally historic sites. We agree that 'only the Yakama Nation can determine what is significant to the Tribe,' and we support the issues brought forth by them and hope that Rye will work toward a resolution with Yakama Nation about the potential detrimental impacts to these important resources.

Consultation without taking additional and appropriate action is not consultation and "hiring a Yakama Nation program to provide technical expertise is not a resolution to concerns brought forth by the Tribe." Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies such as FERC to take into account the effect of their undertakings on historic properties and "FERC has a Federal Trust Responsibility to preserve and protect resources significant to the Yakama Nation." The DLA states in its Historic Properties Management Plan (HPMP) that:

There are known archaeological resources and TCPs within the proposed Project APE and Project footprint in the vicinity of the upper reservoir. However, there are no existing structures (new or historic) within the Project Boundary or APE including both the upper and lower reservoir areas. As a result, impacts are limited to known and unknown archaeological resources including damage during construction activities and/or permanent loss through land use conversion (e.g., constructing permanent structures over cultural resources)....Construction and/or operation activities could have the potential to disrupt (via visual or auditory effects)

¹⁵ *Id.* at 1.

¹⁶ See DLA, Exhibit E. p. 75, Section 4.2.

¹⁷ See Yakama Nation Comment on Notification of Intent and Pre-Application Document for the Goldendale Energy Storage Project, FERC No. 14861. Filed on February 21, 2019. P. 1. ¹⁸ *Id*.

traditional cultural use associated with cultural resources within the Project APE. The potential for impacts to archaeological resources and TCPs will be further defined during the licensing process and Tribal consultation.

The Applicant has been made well aware that construction of this project has the high likelihood of causing serious and permanent damage to archaeological and cultural resources, a wait and see approach is insufficient to protect these resources. The Applicant must address the potential for impacts now prior to the Project moving forward.

Additionally, the DLA's HPMP states that:

The Licensee is committed to properly managing cultural resources that have been determined through the evaluation process established in this HPMP to be historic properties affected by the Project, through consultation with Commission staff, the SHPOs, and affected Indian Tribes.¹⁹

However, nothing in the Applicant's actions demonstrate the above statement. Riverkeeper has serious and well-founded concerns about the Applicant's willingness to properly manage cultural resources given their lack of appropriate action so far. For example, part of the HPMP's response plan includes designating a Cultural Resource Coordinator (CRC) to: review activities that may impact cultural resources, provide employees with information and training on appropriate protection measures, coordinate with tribes, prepare annual reports, and maintain confidentiality of sensitive cultural and archaeological information.²⁰ Yet, the plan fails to mention what qualifications this CRC must possess, when they will be hired, and whether interested tribes will be consulted on who to hire. Riverkeeper recommends that this section be updated to include the qualifications necessary to be hired, a timeline for hiring, and that interested tribe's have the power to veto the hire. Adding the job title of Cultural Resource Coordinator onto an employee with little to no experience with cultural resources, tribes, or relevant history of the area does make for an adequate management plan.

Resources and Unanticipated Discovery Plans" procedures.²¹ Pursuant to Oregon and Washington state laws, it is illegal to excavate, remove, damage, or otherwise alter or deface, or attempt to excavate, remove, damage, or otherwise alter or deface any archaeological material found on lands in Oregon or Washington.²² The Applicant has been made aware that this area where the they intend to build the Project has been used by tribes since time immemorial,

¹⁹ *Id.* at p. 14, Section 4.1.

²⁰ *Id.* at p. 15, Section 4.2.

²¹ *Id.* at p. 18-19, Section 4.5, 4.5.1.

²² Indian Graves and Protected Objects [Oregon Revised Statutes 97.740-97.760] and Indian Graves & Records [RCW 27.44; Human Remains RCW 68.50].

surveys conducted by the Yakama Nation in 2019 further confirmed and re-identified several archeological sites in the Project area. The likelihood of disturbing archeological material during construction of the project is very high. Typically, when one knows that there is a high likelihood of breaking the law with certain actions, those actions are avoided. The HPMP's procedures for "unanticipated discoveries" in the event that the construction crew finds archaeological material, heavily underestimates the likelihood of this occurring.²³

The HPMP fails to meet the bare legal requirements. Specifically, the HPMP has little to no:

- enforceable provisions for a failure to follow the HPMP,
- oversight of how tribes and appropriate stakeholders can ensure that archaeological material is being treated appropriately in accordance with the law, or
- assurances of confidentiality in the case of a discovery of cultural materials.

For example, part the HPMP states that a "professional archeologist" will be called to examine any archaeological material, but fails to explain who this archeologist is, what ability they will have to remove the material, and where such material will go.²⁴ All of this is extremely problematic given the history of Native American grave robbery, cultural property theft, and hardship of repatriation of such items and ancestors. In discussing the bitter tension between science and cultural property, Tasneem Raja writes:

None of these clashes exists in a vacuum; they often come on the heels of decades, if not centuries, of genocide and erasure aimed at indigenous peoples and their ways of life. And so an object of scientific interest, be it a bone or a mountain, can come to stand for an entire civilization.²⁵

The applicant must address these issues in order to move forward with the project.

The DLA and the HPMP fail to characterize the historical context surrounding the treatment of Indian remains and cultural property in the United States, so this comment will take a moment to include some context as to why this is such a serious issue that FERC and the

²³ See DLA, Appendix G, P. 18, Section 4.5.1

²⁴ *Id.* at p. 19, Section 4.5.1.

²⁵ Tasneem Raja, *A Long, Complicated Battle Over 9,000-Year-Old Bones is Finally Over,* NPR (May 5, 2016, 11:47 AM),

https://www.npr.org/sections/codeswitch/2016/05/05/476631934/a-long-complicated-battle-over-9-000-ye ar-old-bones-is-finally-over.

applicant may not simply gloss over in a veneer of greenwashing and consultation.²⁶ University of California Los Angeles School of Law Professor Angela R. Riley writes:

Some of the earliest writings by colonists reveal European fascination with Native American remains and funerary objects...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 affair with the romantic West.'²⁷ With Western expansion, Indians were viewed as a vanishing people, and Indian "trinkets" and bodies were coveted out of blatant curiosity.²⁸ In congressional debates over NAGPRA [Native American Grave Protection and Repatriation Act], 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.²⁹

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."³⁰ 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.³¹ Then, in 1906 Congress passed the Antiquities Act, intended to protect "archaeological resources" located on federal lands.³² The Antiquities Act, however, considered Indian remains on federal lands "archeological resources," thus converting them into federal property and allowing them to be kept

²⁶ 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")."

²⁷ See, Murphy, supra note 18 at 126.

²⁸ Id.

²⁹ Trope & Echo-Hawk, *supra* note 18, at 126.

³⁰ *Id*.

³¹ Id.

³² Antiquities Act of 1906, Pub. L. No. 209, 34 Stat. 225 (codified as amended at 16 U.S.C. §§ 431-433 (2000)).

and displayed in public museums.¹³³ 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.³⁴

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.³⁵ But perhaps even 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.³⁶

This short, and by no means complete, historical accounting exemplifies the decades of practice and policy which resulted in the abhorrent treatment of Native American burial sites and archeological resources, which by no means is limited to historical examples and continues to this day.³⁷ This history and practice should, at the very least, give pause to licensing this Project because of the identified threats to cultural and archaeological resources that have been identified by the Yakama Nation. Quickly pushing this project through the FERC licensing process and State licensing processes³⁸ because it is an alleged "green energy project" should not be done on the backs of Native communities.

Riverkeeper recommends that FERC and the Applicant defer building this massive Project in this culturally sensitive location indefinitely or until affected and interested tribal nations fully approve of the plans and process.

<u>Appendix D Wildlife Management Plan</u>: Riverkeeper incorporates by reference the USFWS' and American Rivers' comments regarding the Wildlife Management Plan presented in the DLA.³⁹

b. Financial Viability of Project

³⁵ See, e.g., Robert E. Bieder, A Brief Historical Survey of the Expropriation of American Indians (1990).

(http://klamathtribes.org/news/wp-content/uploads/Klamath%20Newsletter%201st%20Qtr%202018.pdf).

³³ Trope & Echo-Hawk, *supra* note 18, at 127.

³⁴ *Id.* at 136.

³⁶ Angela R. Riley, *Indian Remains, Human Rights: Reconsidering Entitlement Under the Native American Graves Protection and Repatriation Act,*" 34 Columbia Human Rights Law Review 49, 52-54 (2002). See Appendix 3 for full article text.

³⁷ Construction of the Ruby Pipeline has sparked major controversy and critics point to its serious impacts on Native American sacred sites and cultural resources *See* Don Gentry and Emma Marris, *The Next Standing Rock? A Pipeline Battle Looms in Oregon*, The New York Times (Mar. 8, 2018 https://www.nytimes.com/2018/03/08/opinion/standing-rock-pipeline-oregon.html). *See also* Klamath News Mar. 2018

³⁸ See House Bill 2819 and Senate Bill 6578.

³⁹ See Appendix 1 & 2 for USFWS and American Rivers' comments.

Riverkeeper has serious concerns about the financial viability of the Project. See American Rivers' Comment on Rye Development's Request for Comments on Draft License Application for Goldendale Energy Storage Project, FERC No. P-14861, March 12, 2020 (incorporated by reference). 40 Specifically, Riverkeeper wants to reiterate,

> 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. These results, as detailed in the report's Appendix – Alternative Debt Structures, give us pause as to whether any adverse impacts to public values such as water quality, water quantity, flow regime, fish and wildlife, tribal and cultural resources, surrounding communities, and/or recreation are worth the risk and generated energy storage.41

Given the identified cultural and archaeological resources in the area, pushing a project through that in all likelihood will fail economically is absurd.

5. An EIS is Required.

Rule 5.16(e) provides that comments on a DLA may include recommendations on whether the Commission should prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS). An EA is a concise review document that takes into account: the purpose and need of the proposal, alternatives, and a brief review of the impacted environment. ⁴² The EA results in either a Finding of No Significant Impact (FONSI) or, if significant environmental impacts appear likely, an EIS.⁴³ Importantly, the FONSI determination is made without consideration of any cumulative impacts or geographic context.⁴⁴ In comparison, an EIS requires everything an EA requires in addition to the inclusion of a much more comprehensive discussion of the reasonable alternatives, and a "hard look" at the cumulative impacts of the proposal, along with all existing and foreseeable future development within the project area.⁴⁵ Given the extraordinary cultural and archeological resource issues of the project, limited information regarding effects to water quality and other environmental factors, the proliferation

⁴⁰ See Appendix 2 for American Rivers' comment.

⁴¹ *Id.* at p. 3.

⁴² See Environmental Protection Agency, National Environmental Policy Act Review Process. https://www.epa.gov/nepa/national-environmental-policy-act-review-process

⁴³ *Id*. ⁴⁴ Id.

⁴⁵ *Id*.

of pump storage projects regionally, and the piecemeal planning of EAs,⁴⁶ Riverkeeper recommends that the Commission conduct an EIS for the Project that addresses cumulative impacts and geographic context.

6. Conclusion

Riverkeeper appreciates the opportunity to provide comments to FERC on the DLA submitted by Rye Development. Riverkeeper reiterates that the DLA's deficiencies preclude comment and that comment should be allowed on a complete DLA. Riverkeeper reserves the right to submit comments and amend these comments once complete information is provided.

Sincerely,

Simone Anter, Staff Attorney Columbia Riverkeeper 407 Portway Avenue Suite 301 Hood River, Oregon 97031 (541) 399-5312 simone@columbiariverkeeper.org

Patricia L. Arnold, President Friends of the White Salmon P.O. Box 802, White Salmon, Washington 98672 pat.arnold@friendsofthewhitesalmon.org

Cc: Jennifer Hennessey, Gov. Inslee Senior Policy Advisor, Ocean Health & Water Quality JT Austin, Gov. Inslee Senior Policy Advisor, Natural Resources & Environment Delano Saluskin, YN Chairman Paul Ward, YN Fisheries Program Manager

⁴⁶ See USFWS Comment, Appendix 1 (explaining that "Applicant has been approved by the Federal Energy Regulatory Commission to construct the Swan Lake North PUmped Storage Hydroelectric Project (Project No. 13318-003, eleven miles north of Klamath Falls, Oregon.)

Jerry Meninick, YN Cultural Division Deputy Director
Carl Merkle, Salmon Recovery Policy Analyst, CTUIR Department of Natural Resources
Jaime Pinkham, Executive Director CRITFC
Rob Lathrop, Policy Development/Litigation Support Manager, CRITFC

APPENDIX 1



United States Department of the Interior

FISH AND WILDLIFE SERVICE Central Washington Field Office 215 Melody Lane, Suite 103 Wenatchee, Washington 98801



MAR 0 3 2020

In Reply Refer to: 01EWFW00-2020-CPA-0009

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

Subject:

U.S. Fish and Wildlife Service Comments on the Draft License Application

Goldendale Energy Storage Project, FERC Project No. 14861

Dear Ms. Bose:

Thank you for the opportunity to provide comments on the Goldendale Energy Storage Project (Project). The U.S. Fish and Wildlife Service (Service) has reviewed the Draft License Application (DLA) for the Project, FERC Project No. 14861, filed on December 16, 2019. FFP Project 101, LLC (Applicant) would be the owner and operator of the proposed Project. We are providing the following comments in accordance with the Federal Power Act (16 U.S.C. 791-828c *et seq.*), as amended; Migratory Bird Treaty Act (16 U.S.C. 703-712), as amended; and the Endangered Species Act (16 U.S.C. 1531 *et seq.*), as amended.

Project Description

According to the DLA, the Project is a closed-loop pumped storage hydropower facility located off stream of the Columbia River at John Day Dam, located on the Washington side of the Columbia River at River Mile 215.6. The proposed Project will involve no river or stream impoundments. 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.

Project facilities include: 1.) an upper reservoir consisting of a rock fill embankment dam approximately 175 feet high, 8,000 feet long, a surface area of about 61 acres, storage of 7,100 acre-feet, at an elevation of 2,940 feet above mean sea level; 2.) a lower reservoir consisting of an embankment approximately 205 feet high, 6,100 feet long, a surface area of about 63 acres,

INTERIOR REGION 9 COLUMBIA-PACIFIC NORTHWEST INTERIOR REGION 12 PACIFIC ISLANDS

storage of 7,100 AF, and an elevation of 590 average mean sea level; and 3.) an underground water conveyance tunnel and underground powerhouse and 23-kilovolt 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.

General Comments

As background, the Applicant has been approved by the Federal Energy Regulatory Commission (Commission) to construct the Swan Lake North Pumped Storage Hydroelectric Project (FERC Project No. 13318-003) (Swan Lake Project), eleven miles north of Klamath Falls, Oregon. This project would move water between two 60-plus-acre reservoirs separated by more than 1,600 vertical feet, pumping the water uphill when energy is available and sending it downhill through generating turbines when energy is needed. By comparison, the Applicant's Project would be even larger than the Swan Lake Project resulting in a significantly larger environmental footprint on the landscape. Our comments below on the Project's DLA discuss these environmental effects.

On May 30, 2019, the Service filed comments with the Commission on the issuance of the Preapplication Document for the Project, and these same comments can be found in the DLA. These comments predominantly centered on the impacts to avian species due to the proximity of the Project to nearby wind turbines, in addition to requests for further studies to minimize impacts of the Project on aquatic and terrestrial species. The Applicant filed comments with the Commission on June 27, 2019, attempting to address these potential impacts. The Service would like to address these comments in further detail and provide additional information regarding the significance of the project area for avian species.

While we agree with the Applicant's assertion, "The wind projects are not associated with the Goldendale Project and therefore any impacts to avian species due to injury or mortality from wind turbines is the responsibility of the owners and operators of the wind turbines," the proposed Project would disrupt current laminar wind flow patterns in the project area. Turlock Irrigation District (TID), owner and operator of wind turbines adjacent to the proposed Project, discussed the negative effects of this disruption in laminar wind flow in their April 4, 2019 filing with the Commission for this proceeding. These negative effects include: 1.) reduced operations and output of wind turbines; 2.) increased damage to wind turbines resulting from a higher level of wind turbidity; 3.) reduced stability of wind turbine foundations; and 4.) increased interactions with wildlife, including avian strikes. TID highlighted these issues in its April 8, 2019 Motion to Intervene filing with the Commission. All of these potential effects are valid, but we would like to focus specifically on item #4.

The Applicant claims incorrectly in Appendix D, Wildlife Management Plan Section 2.3.5 of the DLA that the habitat near the upper reservoir is not unique or uncommon. Exhibit E, page 32 of the DLA explains, "Detailed analysis of home range use of a male golden eagle showed use largely within remaining open habitats including the proposed lower reservoir Project area" (WDFW 2015). The uniqueness of the habitat in the project area is linked to the close proximity of golden eagle nesting habitat. The Washington Department of Fish and Wildlife provides further evidence for this claim in its October 28, 2014 filing with the Commission. Golden eagle radio telemetry data collected in 2007 for eight months indicates significant use of the entire

project area. Since prey availability is a primary factor in governing habitat selection of golden eagles (Marzluff et al. [1997], Hunt [2002], and Fernandez et al. [2009]), the habitat in the area of the proposed upper reservoir is a determining factor in golden eagle nesting preference for the area.

Figure 1 below also demonstrates the history of golden eagle strikes with wind turbines near the proposed Project. As recently as early 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 alter the remaining laminar wind currents lends credence that resulting impacts to avian species would not be exclusive to wind power production in the area. That said, the Service would like to provide specific comments on the DLA to ensure specific and enforceable protection, mitigation, and enhancement measures designed to minimize the potential impacts to wildlife resources resulting from the proposed Project are contained in any license to be issued by the Commission. We also want to highlight the importance of initiating ESA Section 7 consultation early in the licensing process to prevent any undue delays in the development of the Project.

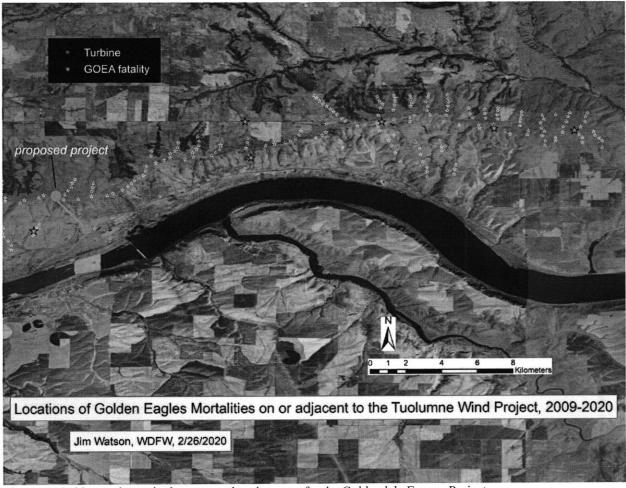


Figure 1. Golden eagle use in the proposed project area for the Goldendale Energy Project.

Threatened and Endangered Species Consultation

As of the filing of the DLA for the Project, the Service has received no coordination from the Commission or the Applicant for the development of a biological assessment (BA) for the purposes of ESA Section 7 consultation. As a reminder, Section 7 of the ESA and its implementing regulations (at 50 CFR Part 402) require Federal agencies to review their actions at the earliest possible time to determine whether any action may affect listed species or critical habitat. If so, formal consultation with the Service is required unless the exceptions at 50 CFR 402.14(b) apply.

Under 50 CFR 402.08, the Commission may designate the Applicant as its non-Federal representative to conduct informal consultation or prepare a BA to determine if the proposed Project may affect listed species.

Because listed species, but no critical habitat, are likely to occur in the Project area, we recommend the Commission (or its designated non-Federal representative) enter into informal consultation with the Service to determine if ongoing and future effects of the Project to listed species warrant formal consultation. At this stage, the purpose of informal consultation is to

ensure that the Applicant understands any potential impacts of the Project on listed species and what studies may be necessary to inform that determination if they decide to file for a license.

We recommend that the Commission obtain a current list of ESA species in the project area, once the NEPA scoping process has been completed. A list of threatened and endangered species likely to occur in Klickitat County and under the purview of the Service can be found at: http://www.fws.gov/wafwo/species_EW.html. If formal consultation is warranted and a BA is prepared by the designated non-federal representative, the Commission must furnish guidance and supervision, and must independently review and evaluate the scope and contents of the BA. The ultimate responsibility for compliance with ESA section 7 remains with the Commission.

Licenses must remain flexible and open to adaptive management to ensure that measures to protect fish and wildlife, including listed species, remain adequate and effective. Although we work collaboratively to resolve issues and concerns regarding changing status and/or new information on listed and proposed species, re-initiation of consultation under section 7 of the ESA may be necessary at some time during the term of the new license if one or more of the reinitiation criteria at 50 CFR 402.16 apply.

Specific Comments on the Draft License Application

- 1.) Exhibit B, Table 3.3-1, Statement of Project Operation and Resource Utilization: The annual loss of water from the reservoir due to evaporation is 420-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 and 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 for addressing deteriorating water quality based on monitoring results should be developed.
- 2.) <u>Appendix D, Goals and Objectives, Section 1.1, Wildlife Management Plan</u>: Goal 2 of this plan states, "Work in concert with existing developments in the Project area to reduce Project impacts to wildlife, including avian species." It further states, "Nearby wind turbines pose a threat to raptors and other birds; therefore, habitat for raptors and their prey will not be improved in the Project area, so as to not encourage their use of these habitat areas." The final version of the DLA needs to specify how the Applicant will coordinate pumped storage hydroelectric operations and wind turbine operations with adjacent wind project operators to minimize impacts of the proposed Project on migratory birds.
- 3.) <u>Exhibit E, Section 2.3 Applicant Recommendations</u>: The Applicant proposes, "...development of an operational adaptive water quality monitoring and management program to monitor the gradual process of solute concentration in the proposed reservoirs due to the closed-loop nature of the system." There are currently no specific measures

- contained in this program to decipher its effectiveness and we recommend the Applicant develop water quality thresholds in coordination with the Washington Department of Ecology to minimize the effects of solute concentrations in the two reservoirs.
- 4.) <u>Exhibit E, Section 3.2.3.1, Environmental Report</u>: In addition to monitoring golden eagle and bald eagle nests, we recommend monitoring all prairie falcon nests in the project area. In 2019, WDFW surveys documented two adult prairie falcons displaying courtship behavior and confirmed an occupied nest. Prairie falcons are also migratory birds and subject to the terms of the Migratory Bird Treaty Act.
- 5.) <u>Exhibit E, Section 10.3.1 Water Quality and Wetlands</u>: The following statement needs clarification: "Nearly all Project-related precipitation losses will be due to precipitation collected within each reservoir." We are not clear if this is a reference to evaporative losses from the two reservoirs or precipitation overflow from the reservoirs. If this is a reference to precipitation overflow, the Applicant needs to specify how such occurrences will be minimized through flow releases at the Project.
- 6.) Exhibit E Section 6.2.1 Former Smelter Site: The DLA discusses how "continued monitoring has shown that the material in the impoundment is not designated as hazardous material, and therefore may be removed to a solid waste landfill when construction of the Project commences. The proposed Project design includes removal of all of the WSI (West Surface Impoundment) material because it is unsuitable for reservoir construction. Additional testing, sampling, and characterization will occur to confirm proper disposal at the time of removal." Please specify which entity will confirm this proper disposal.
- 7.) Appendix D Section 2.3.5 Address Habitat Loss, Wildlife Management Plan: To address habitat loss, the Applicant proposes to utilize existing access roads for the majority of the Project features as a form of protection, mitigation, and enhancement for anticipated effects to terrestrial resources. Since existing roads were designed for other non-Project related purposes, we view this measure as a form of minimization rather than mitigation for Project-related effects. This plan should be revised to reflect this measure. The Applicant also incorrectly assumes the habitat near the upper reservoir is not unique or uncommon and does not provide opportunities for foraging, but is not quality nesting or rearing habitat. We provided information above in this letter, which refutes this conclusion. The Applicant further discusses that it will mitigate these losses with habitat of similar quality. We request that the Applicant provide further detail regarding the purchase of these mitigation lands.
- 8.) <u>Appendix D, Section 2.4.2, Wildlife Management Plan</u>: It is not clear what a "bird exclusion fence" is and how it would deter the use of the reservoirs by migratory birds (potential eagle prey species, particularly for bald eagles). We do agree that a monitoring program to identify bird usage of the reservoirs and measure the effectiveness of bird deterrents should be developed. The monitoring program should count and compare eagle numbers at the reservoir prior to deployment of deterrents, and after. Then, after using this information, decide to maintain, increase, modify or explore other options of deterrents.

9.) <u>Appendix E, Vegetation Management and Monitoring Plan (VMMP), Section 2.1 Noxious Weed Management</u>: The Applicant refers to, "Revegetation with a native plant seed mix after ground disturbing activities" as a best management practice in its VMMP and to use Benson et al. 2011 as a guideline for these revegetation efforts. While we advocate the practices outlined in Benson et al. 2011, we recommend the Applicant provide specific, enforceable measures in the VMMP that include, but not limited to, criteria for measuring the success of revegetation efforts.

Additional Protection, Mitigation, and Enhancement Measures for the Project

Water Resources

• Modify the proposed operational adaptive water quality monitoring program to include: 1.) 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; 2.) threshold criteria and proposed measures that would be taken if water quality in the Project reservoirs deteriorates to below the threshold criteria as demonstrated by monitoring results; and 3.) reporting measures.

Terrestrial Resources

- Modify the proposed Wildlife Management Plan as follows: (1) include an additional preconstruction survey in February to ensure that early nesting raptors are identified; (2) expand the preconstruction survey area for nesting raptors from 0.25 mile to 1 mile and include nests within the line of sight of Project features; (3) adjust the proposed spatial and temporal restrictions on construction activities as needed, based on site-specific environmental conditions and nesting status; (4) install flight diverters on the transmission lines if these lines are not feasible to be buried; and (5) include quantifiable thresholds for determining when additional measures would be needed to address highmortality areas based on the proposed transmission line monitoring.
- Modify the VMMP to specify the specific seed mixes and plant species to be used; planting densities and methods, fertilization and irrigation requirements, monitoring protocols, and criteria for measuring the success of revegetation efforts, and expand the VMMP to cover vegetation management during Project operations.
- Develop a management plan for conservation lands that identifies the parcels to be acquired, the criteria used to select the parcels, and habitat improvements that would be implemented on each parcel.
- Consider the feasibility of burying any applicable transmissions lines proposed for the Project to minimize effects to migratory birds.
- Consider the feasibility of retrofitting adjacent power poles in the vicinity of the Project to mitigate for eagle effects.
- Include in the proposed eagle conservation plan the following additional measures: 1.)

conduct two, preconstruction winter roost surveys for two winter seasons, and 2.) include helicopter flight paths in preconstruction surveys for eagle nests and winter roosts.

Thank you for requesting technical assistance in the development of the proposed Project. If you have any questions or comments regarding this letter, please contact Steve Lewis at the Central Washington Field Office in Wenatchee at (509) 665-3508, extension 2002, or via e-mail at Stephen Lewis@fws.gov.

Sincerely,

Jelly in Kyli Brad Thompson, State Supervisor Washington Fish and Wildlife Office

cc:

USFWS, Portland, OR (K. Freund) USFWS, Portland, OR (M. Stuber) WDFW, Ephrata, WA (P. Verhey) Rye Development, Boston, MA (E. Steimle)

LITERATURE CITED

- Benson, J. E., R.T. Tveten, M. G. Asher, and P.W. Dunwiddie. 2011. Shrub-Steppe and Grassland Restoration Manual for the Columbia River Basin.
- Fernandez, M., J. Oria, R. Sanchez, L. M. Gonzalez, and A. Margalida. 2009. Space use of adult Spanish imperial eagles Aquila adalberti. Acta Ornithologica 44:17-26.
- Hunt, W. G. 2002. Golden eagles in a perilous landscape: predicting the effects of mitigation for wind turbine bladestrike mortality. California Energy Commission Report P50,-02-043F, Sacramento, California, USA.
- Marzluff, J. M., S. T. Knick, M. S. Vekasy, L. S. Schueck, and T. J. Zarriello. 1997. Spatial use and habitat selection of golden eagles in southwestern Idaho. Auk 114:673-687.
- WDFW (Washington Department of Fish and Wildlife). 2015. RFI response letter. Additional study request for the Proposed John day Pumped Storage Hydroelectric Project, FERC No. 13333, Patrick Verhey, WDFW April 2, 2015.

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APPENDIX 2







March 12, 2020

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

RE: Rye Development's request for comments on Draft License Application for Goldendale Energy Storage Project, FERC No. P-14861

Dear Ms. Bose:

American Rivers, Friends of the White Salmon and the Washington State Chapter of the Sierra Club appreciates the opportunity to provide the Federal Energy Regulatory Commission (FERC) with comments on the Draft Licensing Application (DLA) for Goldendale Energy Storage Project (Project), which was submitted to FERC by Rye Development on December 13, 2019. Our organizations have serious concerns that the issues with the Project are more complex than the claims made by Rye Development and discussed in the DLA.

American Rivers is a 501(c)(3) nonprofit organization whose mission is to protect wild rivers, restored damaged rivers, and conserve water for people and nature. Headquartered in Washington, DC, American Rivers has offices across the country and more than 300,000 members, supporters, and volunteers, including many of whom live in the Columbia River Basin states of Washington, Oregon, Idaho, and Montana. We have been working in the Pacific Northwest for over 25 years, and we have a strong interest in protecting and restoring the Columbia River and its tributaries for the benefit of healthy fish and wildlife populations, and human communities.

Friends of the White Salmon River is a non-profit 501(c)(3) organization that has worked since 1976 to protect and restore naturally reproducing anadromous fish populations, and to protect the shorelines, water resources, and habitat areas that affect wild salmonid populations within Klickitat County. Friends of the White Salmon River has an interest in protecting and conserving water resources affecting wild salmonid populations.

The Washington State Chapter of the Sierra Club is a 501(c)(4) non-profit organization with over 100,000 members and supporters in Washington State and over 3.8 million nationally. Headquartered in Seattle, the Washington State Chapter has members and supporters living throughout the state of Washington. The Sierra Club works to protect communities and the planet.

Wildlife Management Plan

As requested by the Washington Department of Fish and Wildlife (WDFW), we support the recommendations laid out for pre- and post-construction raptor nest surveys, monitoring of golden eagle use, and bald eagle monitoring surveys found in the Wildlife Management Plan (WMP) in Appendix D of the DLA. However, we were unable to find any mention of a measurable period to conduct these surveys within the DLA, and based on the recommendations from WDFW, we strongly believe single year studies do not accurately capture the variability of species use of habitat and nests, annual changes in avian abundance, with results that can be biased in nature.

Similarly, the WDFW, in the same letter, also recommended pre- and post-construction surveys over a period of two years each to better understand current species presence of known bat species and the most current mortality rates post-construction. With the new reservoirs that will inherently attract insects and foraging bats that follow, it is necessary to get a new baseline for presence of bat species both pre- and post-construction, and not rely upon the old studies conducted during the construction of the Windy Point Wind Farm project from 2005, currently located at the site. We disagree with the presupposition by Rye Development that these new studies will provide less protective data, especially post-construction of the reservoirs, when abundance of populations of bats could increase.

While we appreciate the recognition by Rye Development of the potential for increased activity and usage to the area by raptors and migratory waterfowl following construction of new reservoirs, we believe that a more comprehensive plan needs to be detailed within the Wildlife Management Plan, Exhibit D. The Protection, Mitigation, and Enhancement (PME) measures and Best Management Practices (BMP), such as bird exclusion fencing and floating plastic shade balls to discourage migratory bird use of the reservoirs are helpful, but we would like to see more detailed plans for the monitoring program, including frequency and time frame, and not just a statement that a monitoring plan will be developed.

Historic and Cultural Considerations

We have serious concerns with the lack of good faith by Rye Development for the overall considerations of the resource and cultural impacts at the proposed site as described by the Yakama Nation in a letter to FERC sent on February 21, 2019. While additional steps were taken during the development of the DLA, including Rye contracting with Yakama Nation to survey the Area of Potential Effect (APE) in July 2019, the recommendation put forth is that avoidance should occur for all historic tribal sites within the proposed project area.

We understand that that Rye Development intends to consult with the Yakama Nation in developing the final APE, as stated in Exhibit E, Section 10.3.6; it is imperative that Rye Development takes the Yakama Nation's recommendations of avoidance for all historic sites seriously. Avoidance could be accomplished by shifting the footprint away from the resource,

limiting activities in the vicinity of the resource, monitoring construction activities near the resource to inform whether additional actions are warranted, or through any combination of these techniques. We do not believe that non-avoidance measures like minimization or mitigation are appropriate for these culturally historic sites. We agree that "only the Yakama Nation can determine what is significant to the Tribe," and we support the issues brought forth by them. Further, it is our expectation that Rye Development has a legal and moral responsibility for full consultation with the Yakama Nation and that it be done in such a manner that is satisfactory to the Nation.

Financial Viability of Proposal

We have grave concerns about the financial viability of the project and how the proposed hydropower project fits into the West Coast wholesale energy markets. With data in the Notice Of Intent/Pre-Application Document (NOI/PAD) and DLA mostly provided by the energy developers as sourced from various agencies and utilities, we felt it was necessary to have a third-party evaluate whether or not a project of this scope is economically viable and worth the various impacts that inherently come with this type of development. Due to a combination of rising construction costs, decreasing open-market energy prices, and as a way to ground-truth the forecast of project generation value, we believe that this independent report provides the necessary outside analysis of whether or not this project can provide renewable energy integration and replacement capacity to support regional decarbonization goals affordably and reliably.

Anthony Jones of Rocky Mountain Econometrics (RME) developed a model of the market forces and financial viability of the project going forward based on the data provided in the NOI/PAD. The final critique is attached to this letter and contains the following findings:

- I. While Rye Development's description of project operations are preliminary in nature and not overly detailed in the NOI/PAD, the parameters of pump storage project operations are well understood, the Goldendale Energy Storage Project's construction costs are sufficiently well defined, and the wholesale energy environment in which it will operate are clear. As a result, RME concluded that the Goldendale project is very unlikely to operate profitably given the state of current and future West Coast and Northwest energy pricing.
- II. Traditionally, pump storage facilities are built in conjunction with other specific energy generation projects to extend the generating plant's efficiency range. Goldendale would be a free-standing, independent operation buying and selling power on the Western transmission grid, from and to the West Coast wholesale energy markets. Based on the overall costs and power generating capabilities, the project would be a price taker in most cases rather than a price setter.
- III. Based on the proposed integration into the current West Coast energy market, and using the figures provided by Rye Development in the NOI/PAD, one could surmise 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. These results, as detailed in the report's Appendix – Alternative Debt Structures, give us pause as to whether any adverse impacts to public values such as water quality, water quantity, flow regime, fish and wildlife, tribal and cultural resources, surrounding communities, and/or recreation are worth the risk and generated energy storage.

Our organizations appreciate the opportunity to provide feedback in this FERC process on the DLA submitted by Rye Development and are available to answer any specific questions about these comments.

Sincerely,

Wendy D. McDermott Director, Rivers of Puget Sound and the Columbia Basin American Rivers P.O. Box 1234, Bellingham, WA 98225 wmcdermott@americanrivers.org

Patricia L. Arnold President, Friends of the White Salmon P.O. Box 802, White Salmon, Washington 98672 pat.arnold@friendsofthewhitesalmon.org

Margie Van Cleve Conservation Chair, Washington State Chapter of the Sierra Club 180 Nickerson Street, Suite 202, Seattle, WA 98109 margie.vancleve@washington.sierraclub.org



208-344-0809 208-631-4334 Cell P.O. Box 1914 Boise, ID. 83701 tjones@design4000.net www.rmecon.com

Anthony Jones - Principal

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
www.rmecon.com

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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.¹
- 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)."²

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- 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.

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

² Ibid<u>., pp. 2.</u>

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 interregional exchanges of California massive mid-day solar oversupply and the significant power generation ramping needed by CA-ISO.3

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).

³ 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.

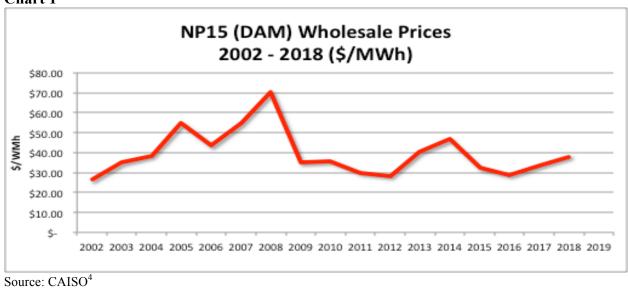
Unlike many, perhaps most, pump storage projects that are built in conjunction with a relatively fixed output, often thermal, generating station, Goldendale will be a free standing, independent operation buying and selling power on the western transmission grid, from and to the west coast wholesale energy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



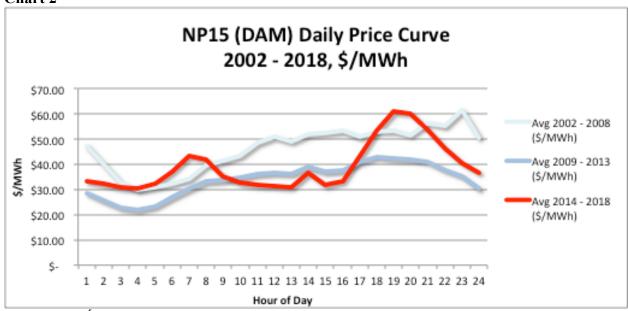


⁴ http://oasis.caiso.com/mrioasis/logon.do

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.





Source: CAISO⁵

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.

⁵ 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 stared 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 seen 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.

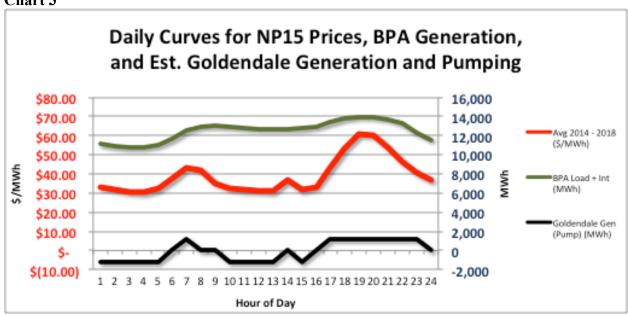
One final takeaway for the post 2008 open market price history is that inflation has been outpacing NP15 prices and that the difference between peak prices and off peak prices, as

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.	Avg.	Avg.
	Minimum	Minimum	Price
	Prices	Prices	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	Ü
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 ⁶		
Generation		
Capacity	1,200	4
Hrs / Day	8	4
Days /Yr.	365	4
Annual Prod (MWh)	3,504,000	4
Generation \$/MWh	\$50	3
Revenue from Generation	175,200,000	
Pumping		
Pumping Rate	1,200	4
Hrs / Day	10	4
Days /Yr.	365	4
Annual Pumping (MWh)	4,380,000	4
Pumping \$/MWh	\$32	3
Annual Pumping Cost	140,160,000	
Net Cash Flow from Operation	\$35,040,000	
Profit (Loss)	(\$181,212,998)	
Cost of Production (\$/MWh)	\$101.72	
Profit (Loss) \$/MWh	(\$51.72)	

⁶ Goldendale, PAD, pp 182; ttp://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/MWh⁷ 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.

⁷ 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!⁸

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

⁸ 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.⁹

"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!

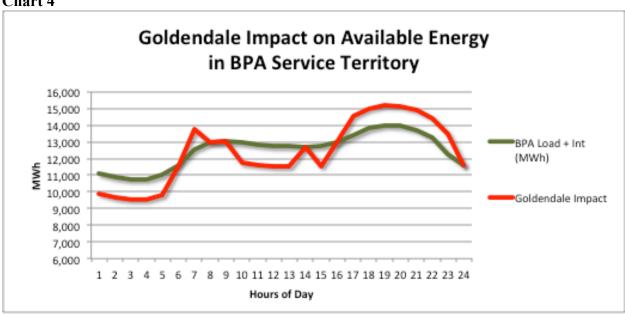
Given Goldendale's precarious financial situation, and in the absence of regulatory or contractual operational constraints, increased wholesale market chaos appears to be the most likely result of Goldendale's operation.

⁹ 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 curve¹⁰ 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.





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.

¹⁰ 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.¹¹

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.

 $^{^{11}}$ And, those prices may be a bit high. CAISO staff concludes load shaping in California only adds about $^{80.85}$ /MWh to market prices. For this analysis that means Goldendale, with its $^{100+}$ / MWh cost structure trying to compete with 83 /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. ¹²

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.

 $^{^{12}}$ 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. ¹³

Goldendale - Without Amortization		Goldendale - With Bankruptcy	
Capital Cost NOI Cost Estimate WSST @ 6.5% Total Estimated Direct Cost	\$2,200,000,000 \$143,000,000 \$2,343,000,000	Capital Cost NOI Cost Estimate WSST @ 6.5% Total Estimated Direct Cost	\$75,000,000 \$4,875,000 \$79,875,000
Pre Const Interest (60 Months)	\$246,310,804	Pre Const Interest (60 Months)	\$8,396,959
Installed Cost	\$2,589,310,804	Installed Cost	\$88,271,959
Maintenance and Plant Cost		Maintenance and Plant Cost	
Cost	\$2,589,310,804	Cost	\$88,271,959
Interest Rate	5.0%	Interest Rate	5.0%
Term (Yrs.)	1000	Term (Yrs.)	1000
Annual Interest Pmt.	\$129,465,540	Annual Interest Pmt.	\$4,413,598
Wages	\$3,860,000	Wages	\$3,860,000
Other	\$4,620,000	Other	\$4,620,000
M&O	\$8,480,000	M&O	\$8,480,000
Total	\$137,945,540	Total	\$12,893,598

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¹³ One simple waty to eleimiante the possibliity 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.

Cash Flow From Operations		Cash Flow From Operations	
Generation		Generation	
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
Pumping		Pumping	
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
Net Cash Flow from Operation	\$35,040,000	Net Cash Flow from Operation	\$35,040,000
Profit (Loss)	(\$102,905,540)	Profit (Loss)	\$22,146,402
Cost of Production (\$/MWh)	\$79.37	Cost of Production (\$/MWh)	\$43.68
Profit (Loss) \$/MWh	(\$29.37)	Profit (Loss) \$/MWh	\$6.32

APPENDIX 3

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.¹

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.²

^{*} 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.³

In order to remedy this social injustice, Congress enacted the Native American Graves Protection and Repatriation Act (NAGPRA, or the Act) in 1990.4 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. 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. Thus, the

^{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. 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. §

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 descendents 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.9 Part IV uses Awas Tingni as an example of the

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. 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." 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

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.

^{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.¹² With Western expansion, Indians were viewed as a vanishing people, and Indian "trinkets" and bodies were coveted out of blatant curiosity.¹³ 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.¹⁴

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. 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. Then, in 1906 Congress passed the Antiquities Act, intended to protect "archaeological resources" located on federal lands. 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. 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.

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.²⁰ But perhaps even

^{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. 21 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.²² 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.²³ 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. 24 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.²⁵ It was not until the 1980s that state burial laws were extended to protect unmarked graves or those outside of specifically designated cemeteries.26

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

- 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.

^{21.} Sherry Hutt & C. Timothy McKeown, Control of Cultural Property as Human Rights Law, 31 Ariz. St. L.J. 363, 365 (1999).

^{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 1990.²⁷ 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.²⁸ 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.²⁹

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.³⁰ As such,

[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).

^{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:

these doctrines capture and acknowledge the importance of group cultural property in giving meaning to human existence.31 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.³² 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. 33 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."34

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. Tonflicts 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. Similarly, because of the

^{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.³⁷ 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.³⁸

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." Recognizing some form of intellectual property rights for indigenous peoples "could be a valuable tool for

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 (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." 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."

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. ⁴² 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. ⁴³ 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." ⁴⁴ For example, many

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.⁴⁵

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. 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. The Cherokees believed that the knowledge of the deceased was placed in the ground with them at the time of burial. Exhumation of an Indian grave would destroy the knowledge and beliefs of the deceased and everything they have taught, including, in

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.⁴⁹ 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."⁵⁰

NAGPRA's role in the preservation of cultural property, and thus, cultural survival, has designated it, first and foremost, a human rights law.⁵¹ 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." As such, NAGPRA is "one of the most significant pieces of human rights legislation since the Bill of Rights." 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.⁵⁴

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.⁵⁵

^{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. 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.⁵⁷ First, it creates procedures through which culturally affiliated Indian tribes can recover human remains and funerary objects from federally funded museums.⁵⁸ Secondly, NAGPRA criminalizes the trafficking of Indian human

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).

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

^{57. 25} U.S.C. §§ 3000–3013 (2000).

^{58.} Id. § 3005.

remains and cultural items.⁵⁹ 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.⁵⁰ 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. 61 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."62 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.63 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.64

The statute defines "federal lands" as "any land other than tribal lands which are *controlled or owned* by the United States." The implementing regulations state, further, that "United States'

^{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. \S 3001(15) (2000); 43 C.F.R. \S 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." 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."

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 government, leaving many Indian graves on land that was intentionally opened up for White settlement.68 Discoveries on these lands are outside of NAGPRA's protections as well.69

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.⁷⁰ If the intentional

^{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. Procedures regarding consultation with Indian tribes are set forth in detail in the Act's implementing regulations. Responsibility for compliance with consultation procedures on federal lands lies with the appropriate land managing agency. 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.

Intentional excavations of cultural items are also subject to the permit requirements of the Archeological Resources Protection Act of 1979 (ARPA).⁷⁵ 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.⁷⁶

^{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. \S 470aa—mm (2000); 25 U.S.C. \S 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.⁷⁷

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). If notice is provided to the federal agency, that agency, in turn, has the responsibility to promptly notify the appropriate tribe. 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.

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. ⁵¹ 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. ⁵² If human remains or cultural items must be excavated or removed, then the permit procedures for intentional excavations apply. ⁵³

^{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. Men discoveries are made on such lands, tribes have no right to notification or consultation under NAGPRA. 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. Becken⁸⁶

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.⁸⁷

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

^{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.⁸⁹

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. 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. 191

As to Castro's NAGPRA claim, the Court of Appeals for the acknowledged NAGPRA's broad Fifth enforcement Circuit 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."92 The court determined, however, that "[b]y its plain terms, the reach of the NAGPRA is limited to 'federal or tribal lands."93 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."94 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.95

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.⁹⁶

^{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. Hughes⁹⁷

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. 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. In 1992, after various phases of the project were considered and approved, the Corps issued a conditional authorization for the proposed project.

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. 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. The corps is sued its authorization, the Abenaki National Actions are supported by the corps in the support of the Corps in the State, and the Village.

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. 103 Although the

^{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.¹⁰⁴ 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. 105

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. 106

3. Western Mohegan Tribe and Nation of New York v. New York ¹⁰⁷

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. In 1999, OPRHP began construction of a bridge and a roadway for public access to the Park.

^{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. 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.

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."111 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."112 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."113 Accordingly, the court denied the Tribe's claim.114

^{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: 115 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. 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 demarked cemetery, as being used as a burial ground for tribal members at least since the late 1800s. Some tribal members claim that the Tribe's oral tradition traces Sioux burials around the Church's landscape to prehistoric times. Sioux burials around the Church's landscape to prehistoric times.

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. 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.

^{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.¹²⁰

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. ¹²¹

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. 122

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

^{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.¹²³

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. 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. 125

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. Lipan Apache in Abenaki Nation,

^{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. 127

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. The trust doctrine, in essence, creates a fiduciary duty owed by the government to Indian tribes.

^{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." 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.¹³¹ Pursuant to this doctrine, ambiguous terms in federal laws are construed in favor of Indians, which results in broader statutory construction.¹³² Construing NAGPRA consistent with the Indian canons has the potential to accommodate many claims by tribes to human remains.¹³³ Not surprisingly, however, none of the three

- 130. Abenaki Nation, 805 F. Supp. at 252 n.26.
- 131. Trope & Echo-Hawk, supra note 10, at 140.

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).

^{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.¹³⁴

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." 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." But, instead of taking a broader view of ownership, each court confined itself to the strictest construction of the Act, as is so

^{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." ¹³⁷

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. 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

^{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 property regimes to avoid undesirable consequences. 139 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. 40 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.¹⁴¹ And zoning laws demonstrate that, in some situations, the full enjoyment of property rights is only possible by agreeing to certain property limitations 142

Property regimes, like all other social spheres of life, are regulated and defined in accordance with society's values. ¹⁴³ 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. ¹⁴⁴ 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. ¹⁴⁵

^{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. ¹⁴⁶ For example, under most major international instruments that address human rights, property ownership is often identified as a basic human right. ¹⁴⁷ 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. ¹⁴⁸

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. ¹⁴⁹ The ability to hold property and wield power is essential to the exercise of other basic human rights. ¹⁵⁰ Property rights empower groups to function as "economic actors," which is essential to self-determination and sovereignty. ¹⁵¹ This

^{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. In this regard, the contemporary international human rights movement has recognized indigenous peoples as special subjects of concern.

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. Additionally, communal ownership and collective tribal power have long been viewed as a threat to mainstream society. 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.

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

^{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.¹⁵⁷

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. 158 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.159

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." 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. Other tribal members testified similarly regarding the significance of the land to the religion and

^{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.

^{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. ¹⁶²

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. 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. Its

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. 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.

^{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.

^{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.¹⁶⁶

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." 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. As such, the current property system is designed only to protect those with property, not those without it. 169

Judicial application of the classical model of property is responsible for a myriad of legal decisions that either devalue or

^{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.¹⁷⁰ 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.¹⁷¹ 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.¹⁷²

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.¹⁷³

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.¹⁷⁴ 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

^{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.¹⁷⁵ In practice, an owner's use of property is limited (or should be) when such use may adversely affect others or society at large.¹⁷⁶ Property has always been, then, not "a domain of freedom into which regulation intrudes. Rather, property is constituted by and suffused with regulation."¹⁷⁷

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. 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." 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.

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." As such, under the social relations model, strict individualism is tempered by significant communal responsibility. 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

^{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." 183

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.¹⁸⁴

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.¹⁸⁵

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.¹⁸⁶

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. ¹⁸⁷ It is this relationship among people within the

^{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 "[pleople 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. 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.

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." In such a system, title does not always give rise to entitlement. 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. 192 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

^{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 (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. ¹⁹³

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." ¹⁹⁴

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

^{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. 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. 196 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

^{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.

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 quasideification 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. 197

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 peracre land value in Kiowa County. Thus, completion of the memorial was stymied as the tribes and the National Park Service negotiated for acquisition of the sacred lands. 199

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.²⁰⁰ 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

^{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." 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. 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

^{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. 203

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, nontraditional 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. 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. Description of a genuine of the survival of political sovereignty apparent.

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

^{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. ²⁰⁶

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.