

January 2, 2013

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Submitted Via Email to: Larry.Goldstein@ecy.wa.gov

RE: Comments on Draft Hanford Natural Resource Injury Assessment Plan

Mr. Goldstein:

Columbia Riverkeeper (Riverkeeper) is pleased to submit these comments regarding the Draft Hanford Natural Resource Injury Assessment Plan (Draft Plan). Riverkeeper's mission is



to protect and restore the Columbia River and all life associated with it, from its headwaters to the Pacific Ocean. Though access to the Hanford Site for activities like camping is limited, Riverkeeper's staff and members typically kayak through the Hanford Reach of the Columbia as many as three times each summer. Since 1989, Riverkeeper has played an active role in monitoring and improving cleanup and restoration activities at Hanford.

Riverkeeper hopes that the Natural Resources Damage Assessment (Damage Assessment) will help restore lost resources and services, and explain the true costs of nuclear development, toxic pollution, and restoration. We look forward to providing input on future aspects of the Damage Assessment.

The Damage Assessment's goal is to restore or replace the natural resources injured by toxic and radioactive pollution at Hanford, and to compensate the public for losing the benefits and services those natural resources provided. 43 C.F.R. §§ 11.14(nn); 11.80(b). The Natural Resource Trustees (Trustees) must determine the scope and magnitude of the damage to natural

resources, and the losses suffered by people relying on those resources. Setting a price on such losses is difficult. In many respects, the Trustees' Draft Plan is an important first step toward disclosing Hanford's costly impact on people and the environment. However, the Draft Plan should be revised to adequately account for the loss of recreational opportunities, and to clearly explain how the Trustees will measure the effects of contamination on salmon and steelhead.

I. The Draft Plan must fully account for lost recreational opportunities at Hanford.

Hanford, the Hanford Reach of the Columbia River, and the Columbia River downstream of the Hanford Site support various outdoor recreation activities, including boating, fishing, bird watching, wildlife observation, hiking, horseback riding, swimming, and hunting. Draft Plan at 4-10, 4-11. These recreational activities are environmental 'services' within the meaning of the Department of the Interior's regulations governing the Damage Assessment process.

Cf. 43 C.F.R. § 11.14(nn). If Hanford's contamination is degrading the quality of recreational opportunities, limiting public access, or decreasing demand for recreational use, the Damage Assessment process should address such injuries to these services. 43 C.F.R. § 11.71(e); Draft Plan at 4-11.



Riverkeeper appreciates the Trustees' recognition that contamination at Hanford has resulted in area closures or public-use restrictions that result in potentially compensable injuries to recreational services. *See* Draft Plan at 4-13. However, merely cataloging the prohibited areas or activities at Hanford will not adequately describe the true loss in recreational services caused by the release of contamination. Even if a certain recreational use is not *prohibited*, contamination from Hanford may discourage people from engaging in that recreational use or degrade the value people derive from of that use.

Riverkeeper therefore requests that the Trustees revise the Draft Plan to study how concerns about contamination from the Hanford Site impact recreational use of Hanford, the Hanford Reach, and the Columbia River downstream of Hanford.

For example, the Draft Plan acknowledges that concerns about contamination from the Hanford Site may limit or decrease the value of recreational opportunities, but does not propose to study or quantify these impacts. The Draft Plan states that "it is possible that some anglers, hunters and other recreators . . . avoid or otherwise modify their behavior due to concern about contaminants . . ." Draft Plan at 4-13. Riverkeeper feels that it is more than 'possible' that recreators choose to avoid Hanford, the Hanford Reach, and the Columbia River downstream of Hanford because of fear of contamination; for instance, anglers faced with chemical

contamination or fishing advisories frequently choose to fish less frequently or not at all. Rather than proposing studies to describe the extent of these impacts, the Trustees conclude that studies are unnecessary because of the “limited scope of these impacts combined with public access to numerous substitute [recreational] opportunities and sites” Draft Plan at 4-14.

The Trustees’ decision not to study how concerns about contamination impacts recreational uses at Hanford rests on two flawed justifications. First, the Trustees assume that impacts to recreation are minor or limited in scope. *See* Draft Plan at 4-14. The Draft Plan states that there are no studies showing that concerns about contamination affect recreation at Hanford. Draft Plan at 4-13. Does this mean that there have been no studies, or that studies have affirmatively found that concerns about contamination do not affect the recreational use of Hanford? If the latter is true (which is hard to believe), then the Draft Plan should cite those studies. The lack of a reference suggests that when the Draft Plan at 4-13 says “the Trustees are unaware of any studies conducted to-date that have identified . . . impacts on recreator behavior [from contamination concerns],” it actually means that no studies were conducted.

Question: *If there are no studies on how concerns about contamination impact recreation, how can the Trustees conclude that those impacts are limited in scope?*

Second, the Trustees propose not studying how concerns about contamination impact recreational use based on the erroneous—and irrelevant—assertion that “numerous substitute opportunities and sites” for recreation exist. Draft Plan at 4-14. ‘Substitute’ recreational activities do not exist because, as explained below, Hanford’s terrestrial and aquatic environments are unique. Even if ‘substitute’ recreational opportunities existed elsewhere, it would not justify ignoring the loss of recreational uses at Hanford. The point of the Damage Assessment is to identify the services that were destroyed at a particular place by a particular release of pollutants. Whether similar services or resources exist elsewhere is irrelevant.

Moreover, there are no ‘substitutes’ for the outdoor recreational opportunities available at Hanford and the Hanford Reach. As the Draft Plan explains, the terrestrial and aquatic environments at Hanford are unique. The opportunity to experience, appreciate, and explore this distinctive landscape while engaging in a variety of recreational activities is not available anywhere else. For instance, the Hanford Reach is the last free flowing segment of the Columbia River in the United States and “contains significant riparian habitat that is otherwise rare within the Columbia River system.” Draft Plan at 3-2. There is literally nowhere else to experience the grandeur and power of the Columbia in its un-dammed, natural setting. Fishing, boating, hunting, and swimming along the Hanford reach are all enriched by this distinctive setting. There is no ‘substitute’ for such an experience.

The terrestrial environment at Hanford is equally unique. Once widespread in the American West, the native shrub-steppe ecosystem found at Hanford is now rare. Hanford is one

of the largest, and highest-quality, areas of native shrub-steppe habitat remaining in the State of Washington. Draft Plan at 3-1, 3-4. Because of its ecological importance, and the scarcity of this habitat type, the State of Washington considers shrub-steppe habitat to be a priority habitat, and the Department of the Interior identifies the native shrub and grassland steppe in Washington and Oregon as an endangered ecosystem. Draft Plan at 3-5. “The Hanford Site . . . represents one of the last relatively undisturbed tracts of this plant community remaining.” Draft Plan at 3-14. This rapidly-vanishing habitat supports a unique array of plant, insect, bird and mammal species. For people whose recreational activities include bird-watching and nature observation—as ends unto themselves or incidental to hiking, hunting, or other pursuits—the opportunity to experience Hanford’s rare healthy sage-steppe community cannot be obtained elsewhere.

Hanford is deeply scarred by toxic pollution. At the same time, the Hanford Site and Hanford Reach are remarkably unique. They contain un-paralleled opportunities for people to experience aspects of Eastern Washington, and the American West, that have all but disappeared. These are important recreational areas; please take the time to study how fears about contamination affect the way people use Hanford, the Hanford Reach, and the Columbia River downstream of the site.

II. The Draft Plan should better explain how the Trustees will assess the impacts of pollution on salmon and steelhead.

The Draft Plan’s explanation of how the Trustees will identify injuries to aquatic resources such as salmon and steelhead is too general, and perhaps unrealistic. The Draft Plan essentially states that the Trustees will begin the injury assessment process by comparing existing data about contamination in fish from the Hanford Reach to “adverse effects thresholds” identified in the scientific literature. Draft Plan at 7-17. There is nothing wrong with this approach *per se*. Yet the Draft Plan is so vague that Riverkeeper is compelled to point out several issues that the Trustees should address. To better inform the public about the Damage Assessment process, and to ensure that the Injury Assessment Plan provides a helpful road-map for the injury assessment process, the Plan should specify how the Trustees will deal with these issues.

First, injury to a biological resource like salmon or steelhead is broadly defined by the Department of the Interior’s regulations, and the Injury Assessment Plan should investigate all the possible ways in which salmon and steelhead may be impacted by Hanford’s contamination. Specifically, the Trustees must assess whether, and to what extent, contamination from Hanford causes death, disease, behavioral abnormalities, physical or genetic mutations, or reproductive problems in salmon and steelhead. 43 C.F.R § 11.62(f)(1)(i). The Plan should acknowledge that *any* of these affects constitutes an injury, and lay out specific procedures for assessing whether each of these impacts have occurred.

Second, the Plan should explain whether there is enough information about all of the above forms of injury to make the Trustees' chosen approach work. The Draft Plan's approach will fail unless there are sufficient, high-quality data about tissue contamination levels in salmon and steelhead from the Hanford Reach. The Draft Plan's approach also relies on the scientific literature to provide "thresholds" for death, disease, behavioral abnormalities, physical or genetic mutations, and reproductive problems in salmon and steelhead for *each* contaminant (and perhaps more importantly, the mixture of contaminants) released from Hanford. It is unrealistic to think that *all* of this information already exists in the scientific literature? The Plan should contain some preliminary analysis of what information is available and what data gaps exist.

Third, the Plan should contain concrete guidance on how the Trustees will identify and respond to information gaps. The Plan should lay out some sort of metric for assessing the sufficiency of existing information—both the sufficiency of the fish tissue samples from Hanford and the sufficiency of the scientific literature providing injury thresholds. Similarly, the Plan should spell out the procedures to follow if the existing information is insufficient. For example, what kind of studies will be done and what procedures will be followed to ensure that those studies generate high-quality information? An Injury Assessment Plan cannot make every decision about the injury assessment process, but a good Plan would at least provide a framework and metrics for making decisions in the future.

The Draft Plan's approach to assessing injury to aquatic biological resources like salmon and steelhead is not wrong. Rather, it is too general to assure the public that the Trustees will consider all the forms of injury required by 43 C.F.R § 11.62(f), and too general to guide the Trustees' injury assessment process going forward.

Conclusion

Riverkeeper appreciates the opportunity to provide input on this important planning document. We look forward to reviewing the final Injury Assessment Plan and participating in the Damage Assessment process in the future.

Sincerely,

Miles Johnson
Clean Water Attorney
Columbia Riverkeeper