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HANFORD NATURAL RESOURCES TRUSTEE COUNCIL

TRUSTEE COUNCIL CONFERENCE CALL

June 29, 2009

Consisting of 21 pages,
including this coversheet

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HANFORD NATURAL RESOURCES TRUSTEE COUNCIL
Senior Trustee Conference Call
June 29, 2009

Conference Call Summary

Agenda

The agenda for the conference call was to:

- Review, discuss, and vote on 2011 budget alternatives
- Discuss funding issues, including in-target/above-target designations
- Introduce the idea of a legal working group

Attendees are listed in Attachment A. An updated Action Item list for the Council is provided as Attachment B. The budget support document is provided as Attachment C.

Convening

- **Introductions.** Participants were welcomed and introduced.
- **Overview.** Paul provided a brief overview of the topics to be discussed and the work that the Council has done since the last Senior Trustee conference call to further develop the basis for the 2011 budget.

2011 Budget Alternatives

- **Questions and Discussion.** To introduce the topic, Paul placed the current FY 2011 budget alternatives in the context of the previous alternatives and explained the primary differences between the two remaining alternatives. He emphasized the conceptual differences between them, primarily the collective council nature of Alternative A vs. the individual trustee nature of Alternative B. There are also differences in assumptions about how fast the council can move in making decisions, when products can be completed, and given the budget situation, whether all of the Phase II work can be completed in 2010.

Senior Trustees asked a variety of questions about the basis for the FY2011 budget alternatives, including these assumptions and conceptual differences, and whether the products would differ under the two alternatives. Each Senior Trustee provided his or her current perspective on the alternatives and issues they represent. Most supported the collective work the Council has done and agreed that it would provide a stronger basis for DOE budget requests.

- **Budget Vote.** Senior Trustees voted on the budget alternatives, with the following results:

- ⇒ NOAA, US DOE, US F&W, WA Dept. of Ecology, OR DOE, and Nez Perce in favor of Alternative 1.
- ⇒ Yakama Nation in favor of Alternative 2.
- ⇒ CTUIR not present. *[Subsequently, CTUIR indicated it prefers the higher amount based on a) an internal estimate of CTUIR needs, which indicates that some of these needs were not included in the HNRTC collective budget, and b) because there may be additional TWGs and/or HNRTC work beyond what was included in the 16 FTE estimate.]*

Phillip additionally stated on behalf of the Yakama Nation that he would consider option 1 after seeing an analysis of how the FTEs were allocated, since no breakout was provided for alternative 1. Polly echoed the need to understand how FTEs would be allocated, and the Council took it under advisement for near-term discussion. Teresa will follow up with CTUIR after the settlement conference and the holiday.

In addition, Phillip expressed his concern over the Council budget not being entirely placed within target as part of DOE's budget process. This makes it more difficult for the Yakama Nation to support the lower Council budget alternatives. This comment led into the following topic.

In-Target/Above-Target Budget Allocation for 2011

- **Background.** Paul introduced this issue by expressing the difficulty the Council has had in coming to terms with some of the 2010 budget being in-target and some above-target. Dave had made a statement in the previous Senior Trustee call that this would be the case again in 2011, and Paul asked Dave to describe that process and provide some insight into how the decisions are made. Dave did so, indicating that two of his highest priorities are safety onsite and compliance with the TPA, and if funds are limited, these will take precedence.
- **Discussion.** Trustees expressed a variety of reactions and concerns, ranging from empathy with the difficult choices that have to be made and a desire to support DOE in continuing to obtain as much funding as possible for the Council, to continued frustration that Council budgets are affected by this internal DOE process and wondering if there might be other legal alternatives. Thanks were also expressed to Dave personally for his past and continued efforts to obtain the funding that the Council has.

Dave suggested that the Senior Trustees reconvene in early August, when he believes he will have more information on the in-target/above-target amounts for 2011. He will contact Teresa or Paul to set up that date once he has a better idea when the information will be available.

Legal Working Group

- **Introduction.** Paul and Teresa briefly introduced this topic, indicating that the Council had reached a point in its work where specific legal topics were coming to the fore and needed to be answered through some mechanism. In the past, they could be put off, but as part of the Phase II Injury Assessment Plan, they will need to be addressed. Some examples were given of the types of topics that have come up, including temporal scope and exclusions to CERCLA.
- **Discussion.** Due to the settlement conference occurring the following day in Seattle, most of the trustees were not prepared to discuss this issue in full at this conference call, but some did make preliminary remarks. Both OR and WA expressed resource concerns, and a willingness to work with this need if the approach were to address specific and directed legal issues on an ad hoc basis, rather than with a standing legal working group. The Senior Trustees agreed to consider the matter and discuss it again after a couple of months.

Adjourned

ATTACHMENT A
Conference Call Attendees

CTUIR

Not present

Nez Perce Tribe

Gabriel Bohnee*

Dan Landeen

Yakama Nation

Phillip Rigdon*

Jay McConnaughey

Andrea Spencer

OR Dept. of Energy

Ken Niles*

Paul Shaffer

WA Dept. of Ecology

Polly Zehm*

Larry Goldstein

WA Fish & Wildlife

Not present

NOAA

Craig O'Connor*

US Dept. of Energy

Dave Brockman*

Al Hawkins

Doug Shoop

Connie Smith

Dana Ward

US Fish & Wildlife Service

Greg Hughes*

Facilitator

Teresa Michelsen

* Senior Trustee representative

ATTACHMENT B

ACTION ITEMS

	Assignee/Action	Date Assigned	Date Completed
271	Develop calendar of events accessible online. <i>ACTION: Steve</i>	3/17/09	
273	Review and revise by-laws and distribute for Council review. <i>ACTION: Teresa</i>	3/17/09	
274	Review and revise letter process and distribute for Council review. <i>ACTION: Teresa</i>	3/18/09	
283	Write a letter to the sturgeon workgroup requesting samples for NRDA injury assessment. <i>ACTION: Toni</i>	3/19/09	
284	Determine whether/how DOE contracts can be extended over more than one year. <i>ACTION: Al, Connie</i>	5/20/09	
288	Look into meeting location options for Sept. <i>ACTION: Teresa</i>	6/22/09	
289	Send further comments and revise Phase II SOW <i>ACTION: Steve, all</i>	6/22/09	
290	Review Restoration TWG Resolution and memo and send comments to Charlene by the July meeting. <i>ACTION: Restoration TWG members</i>	6/22/09	

ATTACHMENT C

FY2011 Natural Resource Damage Assessment Budget

Background

Congress passed the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) to ensure timely cleanup and restoration of contaminated sites and to require responsible parties to fund or reimburse the associated cleanup and restoration costs. CERCLA has two main parts, 1) the response process to clean up the contamination and 2) the restoration, or natural resource damage assessment (NRDA) process. The Environmental Protection Agency (EPA) oversees cleanup actions, while various federal, state and tribal representatives serve as natural resource trustees for restoration under NRDA. As part of NRDA, CERCLA provides for the recovery of the "...damages for the injury to, destruction of, or loss of natural resources, including reasonable costs of assessing such injury, destruction or loss resulting from the release." For the Hanford Site, the natural resource trustees include the U.S. Department of Energy (Richland Operations Office and the Office of River Protection, both of which are part of the DOE Environmental Management program (EM)); U.S. Department of the Interior (DOI); U.S. Department of Commerce; state of Washington; state of Oregon; the Yakama Nation; the Confederated Tribes of the Umatilla Indian Reservation; and the Nez Perce Tribe.

Recent EM guidance (memorandum from Charles Anderson, Deputy Assistant Secretary for Environmental Management, June 27, 2006) states, "...it will generally be in the Department's interest to work collaboratively as possible with its co-trustees. Moreover, the scope of a particular trustee's jurisdiction may be uncertain in some cases. Consequently, sites are encouraged to be as inclusive as possible in the decision-making process." In April 2007, the federal trustees at Hanford determined to proceed with the injury assessment phase for the Hanford site and stated, "We [DOE, DOI and NOAA] look forward to...working cooperatively with the state and tribal trustees as we move forward in the NRDA process at Hanford."

The trustees formed the Hanford Natural Resource Trustee Council (HNRTC) in 1993 with DOE-RL serving as an administrative coordinator. The Council serves as a venue for cooperation and coordination of work on response and NRDA activities. The council objectives are:

- To help ensure natural resource values are fully considered in decision-making related to the Hanford Site;
- To integrate, to the extent practicable, natural resource restoration into cleanup action and to minimize additional injuries to natural resources during cleanup;
- To conduct an injury assessment, including development of an injury assessment plan as defined under 43 CFR Part 11, in support of ultimately restoring resources lost from Hanford contamination.

Basis for Action

In 2006, the Yakama Nation completed a preassessment screen for the Hanford Site and determined that there was sufficient information regarding on-going injury to proceed with a natural resource damage assessment. Washington State concurred with the Yakama Nation's determination. In 2007, the CTUIR also completed a preassessment screen and a determination to proceed with an NRDA for Hanford. In April of 2007, the federal trustees determined to proceed with an NRDA and begin the Injury Assessment Phase in parallel with ecological risk assessments.

The Hanford Natural Resource trustees are conducting an injury assessment for the Hanford Site. The assessment is designed to evaluate the extent to which natural resources in and around the Hanford Site have been impacted by contaminants released from the Hanford Site. To the extent such impacts are identified, the trustees will quantify the injuries and establish the type and quantity of restoration necessary to compensate for the lost natural resources.

Process and Status

The Trustees are committed to ensuring that cleanup decisions consider, address, and minimize natural resource injuries. Therefore, the trustees plan to coordinate the NRDA with related cleanup work to the greatest extent possible, increasing efficiency of the cleanup and reducing costs.

Although final determination of the damages may not be possible before the cleanup is completed, there is no reason to delay injury assessment. Indeed, it is possible to reduce the ultimate damages by working to mitigate injuries when choosing among remedial options, and by conducting early NRDA restoration where possible. Damage estimates have a temporal component and accrue over time; therefore, completing restoration early can significantly reduce the cost of restoring the site. This is part of the reason DOE and EPA guidance call for considering and mitigating natural resource injuries concurrently with response actions.

The Hanford Natural Resource Trustees have agreed to proceed with an NRDA process using DOI regulations and guidance. The overall steps for this process are (Figure 1):

1. Pre-assessment screen
2. Assessment Plan Phase
 - a. Assessment Plan
 - b. Injury Determination Phase (this is where we will be in 2011)
 - c. Quantification Phase
 - d. Damage Determination Phase

3. Post-Assessment Phase

In 2007 and 2008, DOE provided funds needed to allow the HNRTC to begin planning the injury assessment. A contractor was hired in April 2008 to begin the scoping and planning (Phase I) of the injury assessment plan. Products that will be produced by June 30, 2009 include:

1. List of potentially injured cultural resources
2. Injury assessment Conceptual Site Model
3. Data resources integration report
4. Data management report
5. Summaries of kick-off meeting, workshops, and other meetings with the trustees related to Phase I work

A contractor will be hired as soon as FY2010 funds are available for preparation of the injury assessment plan (Phase II), and is scheduled to complete the injury assessment plan, along with a site-wide quality assurance management plan, in FY2011. The assessment plan will generally follow the DOI regulations for a NRDA "Type B" assessment.

Budget Basis

In May 2009, the HNRTC completed a strategic planning process to support development and refinement of 2010 and 2011 budgets, and beyond. The Council developed a mission statement, process and task-related objectives, and specific tasks for each objective that will carry the process through injury assessment planning, injury determination, quantification, and restoration. FTEs, support staff, and contracting requirements were developed based on the identified activities and collective experience with other NRDA sites and processes. These requirements were, in turn, used to develop budgets and priorities for 2010 and 2011, and will serve as the basis for the budgeting process in the future. The mission, objectives, and task list can be found in Attachment A.

The overall FY2011 budget has three components: 1) Phase II contract and injury assessment studies, 2) support staff, and 3) trustee involvement, as summarized in Table 1 and discussed below. Two budget alternatives have been proposed. **Alternative 1** was based on the planning process described above. **Alternative 2** differs in several important ways from Alternative 1. First, FTE were determined as they have been in the past, by summing the requests from each individual Trustee, rather than by building a "Council" estimate of FTE needs. Second, this budget assumes that Phase II will be completely funded with 2010 funds, including carryover 2009 monies, \$2320K as included in the President's 2010 budget request, plus the additional \$500K the YN has requested USDOE to provide. In addition, this alternative assumes that at least 4 studies will be initiated in 2011.

One substantial factor affecting the 2011 budget is that insufficient funding is available in the President's 2010 budget for DOE to support planned 2010 activities. Therefore, some activities, including the Phase II Injury Assessment Plan and hiring of a Project Coordinator, must be extended or delayed into 2011 unless additional funds are provided. This is true even when carry-over funds from 2009 are taken into consideration.

The above situation creates considerable uncertainty when attempting to plan and carry out a successful NRDA process. Therefore, FY2011 injury assessment activities are requested to be placed "within target" or otherwise dedicated funding, as these funds are by statute intended to be provided over and above those for cleanup activities. The HNRTC supports the vital cleanup work DOE is conducting at Hanford and has no interest in diminishing the funds available for those activities.

To place these alternatives into context, the Senior Trustees previously considered three budget alternatives in the amounts of \$5.8M, \$6.347M, and \$9.147M. Alternative 1 below, based on the Council task list, falls just above the lowest alternative previously considered, while Alternative 2 below, based on the original trustee funding requests, falls just above the middle (or hybrid) alternative previously considered. Note that the HNRTC is in consensus on the amount needed for studies and for support staff. The only numeric difference between the two alternatives is in the amount for trustee participation, although there are also differences in timing/phasing and 2010 budget assumptions, as noted above.

Table 1. FY 2011 NRDA Budget Alternatives

Item	Cost Alt. 1	Cost Alt. 2
Phase II Completion and Injury Studies	\$3,200,000	\$3,200,000
Support staff		
Facilitator/public involvement	\$150,000	\$150,000
Project coordinator	\$210,000	\$210,000
Data management/GIS	\$300,000	\$300,000
Trustee Government Participation	\$2,160,000	\$2,637,000
Total	\$6,020,000	\$6,497,000

Phase II Completion and Injury Studies

In both budget alternatives, the first item includes Phase II contract needs unmet by the 2010 budget, potential extensions of the Phase II contract into 2011 and a contingency fund for Phase II, as well as study contracts for the first few studies that may be carried out in 2011. It is unknown the extent to which Phase II will actually extend into 2011; it depends on when DOE's 2010 funds become available, what the bids for Phase II actually are, when the contract can be put in place, and how fast both the Council and the Phase II contractor can complete the required tasks outlined in Attachment A. Many of these things cannot be predicted in advance. However, if Phase II can be completed more quickly, then more of this money will be available to conduct studies, and the converse is also true. Therefore, the Phase II extension and study contract funds have been combined.

The following are examples of some of the early study areas that may be addressed by the Council, subject to further discussion by the TWGs in FY2010/2011. All of these are simply provided as "placeholders" for budgeting purposes; exact studies to be conducted will be determined by the Council based on TWG recommendations in 2010 and on the draft and final injury assessment plans.

- 1) Establishment of environmental baseline
- 2) 3-D river model (43 CFR 11.64)
- 3) Location and characterization of groundwater upwelling areas in the Columbia River in coordination with response contractors (43 CFR 11.63)
- 4) Fate and transport of contaminants (43 CFR 11.64); e.g., mapping Cr plumes in the Columbia River.
- 5) Effects of contaminants of concern on aquatic ecosystems (43 CFR 11.62); e.g., continuing studies on the effects of Cr on salmon, or continuing studies on sturgeon
- 6) Effects of contaminants of concern on terrestrial/riparian ecosystems (43 CFR 11.62); e.g., evaluation of whether swallows are using contaminated bank sediments

Both alternatives make the following general assumptions about cost:

- \$500K for a literature review or analysis of existing data
- \$1M for a bioassay study or limited field study
- \$1.5M for a field study

Alternative 1

The Alternative 1 budget assumes that an extension of the Phase II Injury Assessment Plan process well into 2011 will be needed, and that the council, the TWGs, and the contractor will be largely focused on this primary activity until it is completed. In addition, the TWGs expect to be developing criteria for study selection and beginning to review early studies or literature reviews that could be carried out in 2011, given remaining funding and time.

Under this scenario, it is uncertain how many studies could be carried out in 2011, but it is likely that at least 2 could be considered. The remaining amount would support completion of the Phase II Injury Assessment Plan. The rationale for including fewer and smaller studies in 2011 is to allow time for staff to come up to capacity and make good decisions about the data gaps that remain, be fully informed by the Phase II injury assessment plan, and have criteria in place for selecting among potential studies.

Alternative 2

This alternative is more focused on completing the Phase II Injury Assessment Plan quickly, and would maintain a completion date of December 2010 for that effort. It also assumes that 4 studies will be planned in 2010, and can therefore be carried out in 2011. The rationale for moving more quickly is to allow better integration of NRDA and CERCLA response activities, and to reach restoration and completion of the NRDA process in less time. However, it should be noted that sufficient funds to support this timeline are not currently available in the 2010 budget.

Support Staff

Both alternatives assume that the trustees will continue to need the services of a facilitator (hired in FY2009), project coordinator (which was removed from the 2010 budget due to lack of funds), and administrative assistant (provided by DOE) in 2011, and include the same amount for these contracts.

The trustees will need independent access to large amounts of data generated through 1) the NRDA process, 2) the Remedial Investigation process, and 3) other means such as historical fate/transport work performed from the initial operation days. Access will require a server system accessible by all trustees and housed remotely from the Hanford Site.

Trustee Involvement

The HNRTC must collaboratively plan, approve, and implement all aspects of the NRDA. As such, funds are requested not only for oversight of a contractor, but for active participation in contractor activities and for Council activities in addition to contracted work. Trustee participation on NRDA councils is intensive and time-consuming, particularly when NRDA funds are not dedicated at the beginning of the process, the number of trustees and their varying interests is large, and the trustees anticipate being extensively involved in planning, implementing, and interpreting studies.

Good contracting and support staff are essential to the Council's success; however, so is adequate funding to bring trustee resources to bear. The Council is committed to hiring, both collectively and within individual member governments, the necessary contractors and staff to participate at all levels of the Council's activities. Currently, the Council consists of a Senior Trustee group, a Technical Trustee group, and six Technical Workgroups, all of which must be staffed (note: since the analysis, a seventh Tribal TWG has been identified and that was not included in the analysis). In addition, additional staff will participate in reviewing and preparing documents and in design and oversight of work products. A Task List for the Technical Workgroups for 2010/2011 was prepared as part of this planning process and is included as Attachment B.

The Trustees have wide variations in their abilities to take on additional staff, and are often affected by unexpected hiring freezes and other such factors. Therefore, it is not anticipated or required that all trustees have an equal budget; however, it is expected that all staff and contractors hired by the Trustees will support activities of the Council in an active and visible way, sharing work products and participating on work groups commensurate with their allocation.

Table 2. FY 2011 Cost of Trustee governments in NRDA

Government	Cost Alt. 1	Cost Alt. 2
Confederated Tribes of the Umatilla		\$650,000
Nez Perce Tribe		\$250,000
Yakama Nation		\$825,000
State of Oregon		\$150,000
State of Washington		\$240,000
Dept. of Commerce		\$250,000
Dept. of the Interior		\$272,000
Total	\$2,160,000	\$2,637,000

Alternative 1

Alternative 1 supports 16 FTEs, at an average cost among the Trustees of \$135K. The number of FTEs needed is based on a detailed evaluation of the tasks that need to be conducted in 2010 and 2011, including participation in the Council, participation in the Technical Work Groups, and preparation and review of council and contractor products. It should be noted that approximately ¾ of these FTEs are dedicated to technical, rather than oversight, tasks. The FTEs have not been allocated among specific trustees, but are based on the collective number required to do all of the Council's work. Details of the FTE calculations are provided as Attachment C.

Alternative 2

Alternative 2 supports 20 FTEs, and is based on each individual sovereign government's analysis of its need to be fully involved in the injury assessment plan phase process. The range of effort varies among the parties and is based on each government's own determination of the level at which it will be engaged to carry out its trust responsibilities for its trust natural resources. The rationale for each trustee's request is provided below:

- **Confederated Tribes of the Umatilla (equivalent of 5 FTEs).** The CTUIR for FY2011 anticipates funding one additional FTE than was requested in FY2010, which includes the hiring and subcontracting of an equivalent of at least four FTE's (at least two new employees, and the rest are subcontracts and allocated to existing staff). Fields of expertise desired: shrub-steppe/restoration ecology, soil science, phytotoxicity, aquatics biology, data management/modeling and policy analysis.
- **Nez Perce Tribe (equivalent of 2 FTEs).** During 2011, the Nez Perce Tribe anticipates funding two full time NRDA support positions. We will be hiring one more staff position in addition to our present staff that may be an aquatic toxicologist or policy person.
- **Yakama Nation (equivalent of 7 FTEs).** The Yakama Nation recognizes that the Hanford Site is a Superfund mega-site. Hazardous substance releases via air and water have transported contaminants far from the site. A thorough understanding of the degree and extent to which the contaminants have come to be located requires a significant effort by the Yakama Nation to obtain a level of

understanding of cultural and natural resources potentially injured by Hanford hazardous substances, located off and on site.

The Yakama Nation expects the council to have a draft final injury assessment plan (IAP) and a final Programmatic Quality Assurance Management Plan completed by the end of FY 2010 along with four study plans. The IAP should be finalized in early FY 2011 with the council developing additional studies plans beginning at that time. Based on those expectations, the Yakama Nation sees the council dealing with 6 or more injury studies in FY 2011. In order to effectively implement the injury assessment plan phase, we will need a cadre of expertise using staff and contractors, including consulting firm(s) with an interdisciplinary team of experts. The use of contractors allows for the flexibility to tap expertise tailored for specific studies (TBD) selected through the multi-government collaborative approach.

The Yakama Nation will require 7 FTEs to deal with the multiple products and studies being addressed by the council in FY 2011.

- **State of Oregon (equivalent of 2 FTEs).** During 2011, the State of Oregon expects to fund one staff position (one FTE) to support NRDA activities. This is intended to be a new position, supplementing Oregon's existing staff support for trustee activity for response and NRDA efforts. Likely area of expertise will be aquatic and/or restoration ecology.
- **State of Washington (equivalent of 2 FTEs).** Washington State has one FTE currently dedicated to the injury assessment, and anticipates hiring one additional FTE in 2011. At this time it is uncertain what the field of expertise needed will be. In part that decision will be determined by the type of field studies being conducted.
- **Dept. of Commerce (equivalent to 1.4 FTEs).** In 2011, NOAA anticipates committing one position (one FTE) for representation on the HNRTC, participation in technical work groups (aquatic, study design and review, restoration), and as NOAA's technical lead on NRDA activities. An additional 0.4 FTE (will involve more than one individual) will be funded for management and additional technical staff support. NOAA expects to participate fully in all HNRTC activities but will focus on assessment of injuries and damages to NOAA trust resources (salmon and steelhead).
- **Dept. of the Interior (equivalent of 1.5 FTEs).** During 2011, the US Fish and Wildlife Service will continue funding one dedicated staff position (1.0 FTE/135k) to support NRDA activities. This biologist/environmental contaminant specialist position, initially filled in 2009, serves as a technical lead for FWS in Natural Resource Damage Assessment activities, participant in Technical Work Groups, and as a technical resource to the Hanford Natural Resource Trustee Council.

Senior-level technical and policy support and HNRTC representation (0.5 FTE/75k) will be provided by one or more senior environmental contaminant specialists or managers, as appropriate. The FWS's primary representative on the HNRTC will be Environmental Contaminants Program Manager (located in the FWS Spokane Office). Other support will be provided, as needed, by senior FWS NRDA specialists/managers who work on other major national NRDA sites. This support may be as panel participants for proposed HNRTC workshops on NRDA or additional technical support. Additional required agency overhead is 29.5% (\$61,950) for a total request of \$271,950.

In the budget, DOE's allocation is not listed, as it is provided entirely in-kind.

ATTACHMENT A NRDA Mission, Objectives, and Tasks

Mission Statement:

Identify and restore natural resources injured by hazardous releases from Hanford and compensate for lost uses.

Process Objectives:

1. Work collaboratively and cooperatively.
2. Make timely decisions.
3. Use an effective, transparent process to secure funding in a stable, predictable manner.
4. Integrate NRDA and CERCLA Response actions to the maximum extent practicable.
5. Conduct injury and damage assessment in a comprehensive, thorough, and cost-effective manner.
6. Identify/implement technical support for the HNTRC (TWGs/administrative/technical).

Task-Oriented Objectives and Related Tasks:

The tasks under each objective have been listed roughly in order that they will need to be carried out. However, some tasks are ongoing throughout the process and others will be completed concurrently, or the order may vary from that listed below. Similarly, the Objectives are listed roughly in order of completion, but may be carried out concurrently to some extent.

7. Complete analysis of injured natural resources and services provided
 - Data management (ongoing)
 - Identify the temporal scope of injury (pre-1980, etc.)
 - Identify the geographic scope of injury
 - Agree on the definition of injury (resource-specific) and associated data requirements
 - Develop criteria for:
 - Identifying and prioritizing stressors (substances and activities)
 - Identifying and prioritizing fate and transport pathways
 - Identifying and prioritizing resources of concern
 - Distinguish between exposure and injury

- Identify data gaps
- Complete Phase II Injury Assessment Plan
- Plan injury assessment studies
- Peer review of study plans and results
- Conduct injury assessment studies and review data
- Identify condition of injured resources but for releases from Hanford (define baseline)
- Complete final injury determination
- Determine whether an injury can be restored
- Determine whether an injury can be quantified
- Define injury quantification metric
- Conduct injury quantification

8. Complete analysis of interim and permanent lost uses

- Identify past and future lost uses
- Identify restoration needs that cannot be carried out
- Quantify lost uses

9. Complete quantification of damages

- Quantify damages associated with injured resources
- Quantify damages associated with lost uses

10. Conduct restoration of injured resources

- Identify restoration needs
- Identify restoration opportunities
- Develop criteria for selection and prioritization of restoration projects
- Identify opportunities for early restoration
- Complete restoration plan
- Oversee restoration activities
- Ensure long-term protection and stewardship of restoration projects
- Complete final restoration report

ATTACHMENT B

Role and Tasks of the Technical Work Groups

Technical Work Groups

TWGs are considered subsets of the staff provided by the trustees and may include Council members, other staff, and/or contractors acting as staff
TWGs have no decision authority; they will work through technical issues, develop recommendations, and report to the council for decision/action
A recommendation/reporting process needs to be developed for the TWGs

Current TWGs and Chairs:

- **Source/Pathway** – Dana Ward
- **Groundwater** – Dale Engstrom
- **Terrestrial Resources** – Dan Landeen
- **Aquatic Resources** – Nick Iadanza
- **Human Uses** – Barb Harper
- **Restoration** – Charlene Andrade
- **(Legal)** – has been suggested but is not yet implemented

Major activities/tasks

Some technical tasks must be conducted by the Council as a whole. The following tasks were identified as ones that would most appropriately be carried out by the each of the first five TWGs listed above for its specific resource area. The following list includes injury assessment tasks; quantification and final restoration tasks will be determined once injury assessment is complete.

- Identify opportunities for integration with CERCLA response activities
- Review/update CSM
- Develop definition of resource-specific injury
- Identify metrics and methods for quantifying injury
- Review data for quality and relevance
- Data analysis and summary
- Work closely with NRDA contractors
- Prioritize studies to be conducted
- Develop plans for injury assessment studies (QA/data management)
- Organize peer reviews
- Oversee/carry out/review injury assessment studies

The Restoration TWG has developed its own list of tasks, as follows:

Priority

- Finalize project selection criteria for early restoration projects
- Evaluate natural resources and resource management actions at Hanford
- Initiate and maintain a proposed restoration project list

Additional future tasks and proposals

- Develop a prospectus or template for proposing projects to the TWG
- Develop an understanding of Hanford resources and resource management and conservation plans
- Develop a pilot project to use for example restoration
- Identify environmental conditions and opportunities for restoration
- Establish template / criteria for establishing advanced restoration projects and opportunities

ATTACHMENT C

Development of FTE Needs for 2011

The Council determined near-term staffing needs to carry out the objectives and tasks in Attachments A and B at the May 2009 HNRTC meeting. The Council reviewed and discussed the tasks that will need to be conducted, both in the full Council and in the TWGs, to support Phase II and the early implementation of studies. Council members drew on their experience with other NRDA processes that had a similar structure to determine the time commitments required to participate in the TWGs and Council meetings, and to carry out technical work between the meetings. The following basis for FTE requirements was developed (note that an FTE in this context could be a staff person or a contractor acting as staff):

- Based on each Trustee's stated interest in how many of the TWGs they intend to participate in, it was determined that each TWG is likely to have 6 members on average, and there are currently 6 TWGs. This is also believed to be an appropriate and manageable size for a TWG.
- TWGs are expected to meet as often as twice a month and conduct substantial work in between meetings, particularly while Phase II IAP, study design, and study implementation activities are occurring. This is in line with previous NRDA processes. Based on previous experience, the Trustees estimated that participation in a TWG will require 1/3 FTE. Therefore, a total of 12 FTEs is needed among all the Trustees to participate in the TWGs and conduct associated technical work.
- 3-day Council meetings will continue to occur on a bimonthly basis, and the Council expects to meet at least monthly in between via conference call. In addition, there are both technical and administrative work products to develop and review between meetings. Based on past experience, the Trustees estimated 1 FTE per trustee for Council participation, which may be divided among more than one person, for a total of 8 FTEs among all the Trustees.
- Combining the above, $12 + 8 = 20$ FTEs is required for Council work in 2010 and 2011. However, it was noted that DOE's FTEs are not included in the council budget, so the FTEs were reduced to 16. In addition, it is likely that 2010 will not ramp up to this level immediately and also, USFWS is funded by a separate source in 2010; therefore, the FTE estimate for 2010 was estimated at 12 and for 2011 was estimated at 16.

- The trustees were polled and an average FTE is approximately \$135K/yr. Therefore, the 2010 need would be \$1620K and the 2011 need would be \$2160K to accomplish the tasks identified by the Council.

Note that of the total, only about 4 of these FTEs (1/2 FTE per Trustee) are considered to be associated with oversight and administrative tasks in 2010 and 2011, though that percentage was likely higher in 2008 and 2009 as the process was being initiated. The rest (1/2 of the Council FTEs and all of the TWG FTEs) are associated with technical work needed to meet the NRDA objectives and mission.