PROCEEDINGS[1]

How NRDA Really Works: Industry and Trustee Perspectives

A Roundtable Discussion Sponsored by
The Pacific States/British Columbia Oil Spill Task Force
February 7, 2002
Concord, California

Participants:

Dr. Roger Helm, Chief, NRDA & Spill Response, USFW Region 1, **Moderator**
Linda Burlington, Senior Counselor for Damage Assessment, NOAA, **Keynote Speaker**
Steve Hampton, Office of Spill Prevention & Response, CA Fish & Game, **Panelist**
Tony Palagyi , Equilon, **Panelist**
David Chapman, NOAA, **Panelist**
Gordon Robilliard, Entrix, Inc., **Panelist**
Kathy Verrue-Slater, Office of Spill Prevention & Response, CA Fish & Game, **Panelist**
Gene Mancini, E.R. Mancini & Associates, **Panelist**
Dan Welsh, US Fish and Wildlife Service, **Panelist**
Mike Ammann, Chevron/Texaco, **Panelist**
Mike Parker, San Francisco Bay National Wildlife Refuge, **Presenter**
Steve Sawyer, Don Lollock, Jim Hardwick, Matt Zafonte, Julie Yamamoto, John Holland, Ryan Todd, Wendy Johnson, Scott Schaefer, and Ken Mayer for OSPR;
Stan Norman for the Washington Department of Ecology;
Bob Haddad for JSA;
Fred Wehrenberg for Entrix;
Bob Ireland for Foss;
Mike Zollitsch for Oregon DEQ;
Don Kane for Harding ESE;
Nick Salcedo for BCDC;
Ralph Wehinger for the International Wildlife Recovery Center;
Gary Mauseth and Greg Challenger for Polaris Applied Sciences, Inc.;
Chantal Guenette for ITOPF;
Tom Bartlett and Jonathan Boos for the National Response Corporation;
Curtis Martin for the Hawaii Department of Health;
Tom Suchanek and Amy Gaskill for the US Fish and Wildlife Service;
Larry Dietrick for the Alaska DEC;
Dave Peck for Clean Bay Cooperative;
Heather Taylor for the BC Ministry of Water, Land, and Air Protection;
Jeff Williams and Holly Osen for Chevron/Texaco Shipping;
Terry Joslin for BlueWater Associates;
Pete Bonebakker for Phillips 66;
Jen Kraly for the USCG National Pollution Funds Center;
Robert Sanchez for the USCG;
Robin Blanchfield and Ellen Faurot-Daniels for the California Coastal Commission;

[1] NOTE: This is a roundtable summary and is not intended as a verbatim record of all presentations or comments made during the meeting.

Alex Moghaddam for Cogswell, Nakazawa, and Chang; and
Jean Cameron for the Pacific States/BC Oil Spill Task Force

This Natural Resource Damage Assessment (NRDA) roundtable was sponsored by the Pacific States/British Columbia Oil Spill Task Force, which provides a forum for the oil spill prevention, preparedness, and response programs in the five Pacific US states and the Province of British Columbia to coordinate on issues of common concern.

Dr. Roger Helm, Chief for the NRDA and spill response program for the US Fish and Wildlife Service in Region 1, served as the Roundtable Moderator. In addition to moderating all presentations for the day, Dr. Helm advised the Task Force during their planning for this event, suggesting speakers, format, and topics. He also developed conclusions and summary statements which can be found on page 14 of these summary notes.

Keynote Address: Ms. Linda Burlington, Senior Counselor for Damage Assessment, NOAA

- Using a Power Point presentation, Ms. Burlington began with a basic list of NRDA acronyms and definitions. She noted that under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the term "Potentially Responsible Party" is used because liability is not as easy to prove as in the case of an oil spill under the Oil Pollution Act of 1990 (OPA '90), where the responsible party is usually obvious.
- She also noted that private damage claims are allowed under OPA 90, whereas they are NOT allowed under CERCLA. She explained that private claims might include property damage, net loss of revenues or earnings capacity, loss of subsistence uses, and additional costs of public service.
- Whereas the goal of oil spill response is to contain and clean up the spill, the goal of NRDA activities is to restore the environment after the cleanup phase is completed. The regulations which provide federal authority for Trustees to assess damages can be found at 15 CFR 990 under OPA 90 and 43 CFR 11 under CERCLA. NOAA is the lead US federal Trustee for coastal and marine natural resources.
- Ms. Burlington listed the following Trustee needs: a focus on faster restoration and less litigation; a framework for cooperative planning and consensus decision-making; and provisions for data sharing, public participation (since the public helps to define the issues), and improved funding. State agencies especially, she noted, often lack adequate funding to participate fully in the NRDA process.
- Ms. Burlington then reviewed the NRDA procedural basics and how they differed between CERCLA and OPA 90. The pre-assessment phase differs in part because OPA incidents generally are more dynamic than CERCLA sites. The assessment plan and assessment phases under CERCLA have been condensed into the restoration planning phase under OPA. Damage determination is usually more active under CERCLA, with a greater emphasis on financial recovery than environmental restoration. OPA 90 procedures are less complex than those used under CERCLA. Moreover, it's more likely under OPA 90 that a responsible party could implement an approved restoration plan, rather than just paying the Trustees to do so.
- Ms. Burlington noted that NOAA's Damage Assessment and Restoration Program (DARP) has generated approximately $300 million for restoring coastal resources in the US, and provided a map depicting settlements nationwide. Those on the West Coast include the *Tenyo Maru* in Washington and the *Cape Mohican*, *Apex Houston*, *M/T Command*, and *American Trader* in California.
- Asked to explain how the international paradigm related to US protocols, Ms. Burlington noted that OPA 90 was initially controversial internationally. The international regime allows for "reinstatement" of the environment, an authority comparable to OPA 90's restoration mandate, but

does not cover costs of lost uses. She further explained that NOAA had recently signed a Memorandum of Understanding with the International Group of P&I clubs which cover 98% of the worlds vessel tonnage. The International Tanker Owners' Pollution Fund (ITOPF) advises the P&I clubs, she said, and she provided a copy of the MOU to the roundtable attendees.

- Ms. Burlington concluded by noting that cooperative assessments – involving both Trustees and the responsible parties – are commonplace under OPA 90. NOAA is trying to carry this paradigm over to CERCLA assessments. Information regarding a cooperative assessment pilot project to restore natural resources, and their services that have been injured by chronic oil spills and hazardous substance releases, can be found at www.darp.noaa.gov/capp.htm
- She also stated that events like this roundtable, as well as Trustee summits, are key to promoting cooperation.
- Ms. Burlington reported to the roundtable participants that Louisiana is developing a statewide "regional restoration plan" as a pilot project. Information on regional restoration plans can be found at www.darp.noaa.gov/seregion/larrplan.htm. The goal of this planning effort is to establish a statewide program that will: expedite and potentially reduce the cost of the Natural Resource Damage Assessment (NRDA) process; provide for consistency and predictability by detailing the NRDA process, thereby minimizing uncertainty to the public and industry; and increase restoration of lost natural resources and services. NOAA, DOI, and the US Fish and Wildlife service are cooperating with the State of Louisiana to identify habitat regions and develop a plan for each region that includes a list of prioritized projects which could be used for damage compensation.
- Asked about states' roles in NRDA, Ms. Burlington suggested that, in view of limited funding, state Trustees would be wise to pool resources and select lead Trustees so that all agencies don't have to participate.
- Ms. Burlington was asked whether a company could get NRDA credit for mitigation banking prior to a spill event, such as creating a wetland area. She replied that credit was an unpopular concept in advance of a spill, but more acceptable afterwards. It would be best if it were approved as part of a regional plan, she said. Overall, it's a good thing to do for the environment, but it's hard to fit it into a liability scheme like NRDA, since the improvement would be considered baseline if it exists prior to the event.
- Asked about public involvement efforts, Ms. Burlington explaind that OPA 90 regulations require public notice when assessment begins. NOAA looks for forums such as local meetings or newspapers as ways to advise and involve the public.
- Ms. Burlington further provided two more web addresses of interest:
    - For the Coral Reef Task Force: www.response.restoration.noaa.gov/dac/vessels/
    - NOAA's Damage Assessment and Restoration Program: www.darp.noaa.gov

Trustee/Industry Panel # I: Injury Assessment and Damage Determination

General questions/issues speakers were invited to address:

- ➔ Cooperative Assessments: Do they produce better outcomes? Your perspective on pitfalls and strengths?
- ➔ How do you deal with uncertainty in data quality, data accuracy?
- ➔ Role of consultants during this phase?
- ➔ Data scrutiny: Which data is most closely evaluated? (e.g., "fingerprint", water quality, critter injury data, "big ticket items") How is it evaluated? (e.g., consultant firms, local experts, national experts, panel of experts) How often, to what degree, and for which types of data are Chain of Custody procedure data evaluated?

Panel #1 Pair A: Data collection during first days to one week ("ephemeral data")
Questions:

- ➔ Types and quantity of data – discuss approximately five of the most important types of data to be collected
- ➔ Separation of response and NRDA: personnel involved, types of activities conducted, interactions with counsel
- ➔ Preplanning: Should vessel and facility operators have advanced data collection plans? If so, what should be the data priorities for these plans?

Responses and observations from Mr. Steve Hampton, Office of Spill Prevention & Response, California Department of Fish & Game:

- Mr. Hampton stated that, since NRDA is a cooperative process (yet potentially antagonistic), opportunities for involved parties to gather and discuss issues outside of any particular case are very helpful. These gatherings lay a foundation of understanding that goes a long way when a real spill is at hand, he noted.
- According to the NOAA rule, NRDA is the process of collecting and analyzing information to evaluate injuries to natural resources, and determining the restoration actions needed to bring injured resources and services back to baseline *and* making the environment and public whole for interim losses. Thus, our primary goal, Mr. Hampton stated, is compensation in the form of restoration. Damages are primarily the cost to do the restoration project (we do need to cover oversight and monitoring). It is not the money that we are interested in, it's the restoration, he cautioned.
- Natural resource damages are not punitive. Natural resource damages are not necessarily correlated with the volume of oil spilled. Natural resource damages are not even necessarily correlated with the degree and duration of the injury. Natural resource damages are solely a function of the costs to implement compensatory restoration projects, Mr. Hampton said. Of course, the size of the project is correlated with the size of the injury.
- Mr. Hampton stated that he doesn't believe NRDA is "the gorilla hiding in the bushes." His experience on over 40 large and small cases is that NRD costs are usually less than cleanup and response costs. He acknowledged that here are some notable and unfortunate exceptions, largely driven by the vagaries of nature, where the spill, however small, was in the wrong place at the wrong time. Steve quoted Roger Helm's comment that "Each spill has a typical uniqueness."
- Mr. Hampton stated that he'd like to work in a context in which NRDA methods are uniform, where all the Trustees, RP's, and insurance companies, and all the scientists and lawyers, have a uniform understanding of the process, agreement on the methods required, and similar expectations of the results. There are no surprises; there is consistency. He thinks that we are proceeding toward that goal with remarkable speed, largely thanks to the use of Habitat and Resource Equivalency Analysis.
- Mr. Hampton stated that he mentioned the big picture because he believes it's important to have that in mind when responding to a spill. "I've seen the shotgun approach to ephemeral data collection and post-spill studies. I've seen people suggest studies without a real knowledge of the scaling process or the end-game," he stated. As a result, some irrelevant data is collected, while other important data is not collected. It is critical that those familiar with restoration scaling be involved in the initial injury data collection. Should vessels and facilities have advanced data collection plans? Sure, but they must be designed with the NRDA process in mind. Questions must be asked: why is this data important? What will be needed to derive HEA inputs? What needs to be measured, photographed, and documented? What doesn't?
- Mr. Hampton also stated that he'd experienced too many times when RPs say they want to avoid certain studies, make some assumptions, and move ahead. And then too many uncertainties exist for either side to agree on assumptions. Or the technical people agree only to have attorneys then challenge the assumptions in the end. "I now have a minimum threshold of data that I need to collect," he explained. In some circumstances, there are certain studies he views

as non-optional. These are not expensive studies; the cost of these studies is far less than the transaction costs incurred when too many uncertainties exist. Mr. Hampton noted that he has been to several unnecessarily prolonged settlement meetings where the cost of attorney time in the room was three to five times higher than the cost of the study that would have resolved the issue.

- What are the most important types of data to collect? He suggested:
  1) Maps of where the oil was AND where it wasn't; samples must span the impacted and non-impacted areas, so that the impacted area has a known border. The heavily impacted areas are not in question; what become controversial are the gray areas, the lightly oiled areas, the edges of the spill. Where to draw the lines? That's where data is crucial.
  2) When oiled birds are collected, we MUST KNOW the search effort and area associated with their collection. Ideally, spill response is uniform and comprehensive. In reality, it is chaotic and variable. As long as we know what happened, we can analyze it.
  3) Information on baseline resources prior to oiling is important. Get ahead of the spill and describe what was there; photograph and videotape what was there.

- With regard to response, it is no secret that some response data is useful to NRDA. Likewise, Mr. Hampton made the argument that NRDA folks can be useful to response people. Since they are the collectors of data, they learn where the birds are, what beaches have been searched, and what search methods are most effective. They have cultivated relationships with experts that can help with the response. It's a potentially symbiotic relationship, Mr. Hampton stated.

Responses and observations from Mr. Tony Palagyi, Equilon:

- Mr. Palagyi noted that his goal is usually to get to restoration as soon as possible. That was easier during the Bellingham pipeline spill, because he was familiar with the Trustee representatives through the JAT and various drills.
- On the issue of cooperative assessments, Mr. Palagyi commented that NOAA is taking the initiative on CERCLA sites to get PRPs to propose restorations. In oil spills, RPs are taking the lead on developing scopes of study, restoration proposals, etc.
- A negotiated injury assessment agreement facilitates reaching the endpoint – restoration- as soon as possible. Faster restoration creates better public relations.
- On the issue of data uncertainly, Mr. Palagyi noted that uncertainty can bog down the restoration process and result in more questions than answers.
- He recommended using contract labs acceptable to both Trustees and the RP and standards QA/QC procedures. He emphasized the value of determining a-priori what questions the data needs to answer, but also noted that data analysis may lead to more questions and thus delay settlement and restoration.
- Commenting on the role of consultants, he sees them as a major source of personnel for conducting pertinent studies. He also noted that many consultants are familiar with Trustees, and vice versa, which alleviates potential mistrust issues. The RP must maintain control and responsibility for their consultants, and both Trustees and RPs must weigh the need for additional studies recommended by consultants.
- On the topic of data evaluation, Mr. Palagyi reported that he's had success using local experts, but noted that they may propose studies that are not necessarily warranted. National experts, if trusted by both sides, can facilitate the consensus process.
- Regarding types and quantity of data, he recommended that the initial evaluation needs to take a big picture perspective, asking "where, what, when, and who was affected." This is not dissimilar to the SCAT approach, he commented.
- He noted three components of injury assessments: spatial, temporal, and percent impact.
- Background conditions are important to document, if it can be argued that the impacted area was less than pristine prior to the spill/release.
- Video and aerial photographic data are useful in evaluating the extent of impacts, restoration options, and the success of restoration projects.

- Finally, on the topic of NRDA activities vis-à-vis response actions, Mr. Palagyi stated that NRDA should be separate, with a communication link to operations to minimize the potential for collateral damage due to cleanup operations. Integration may also facilitate opportunities to do early restoration during the cleanup phase. He had success with this during the Bellingham pipeline incident. However, integration does not mean NRDA Trustees calling the shots during response or interfering with the ICS process.

Panel #1 Pair B: Baseline Data and Damages
Questions:

➔ What type of pre-incident and post-incident but pre-oiling data should be collected?
➔ Overall, what data/information has proved to be most/least useful? (e.g., literature data (how far back?), local experts, recent pre-incident collections (how recent?), incident specific collections)
➔ Strengths and weaknesses of HEA/REA for determining damages?

Responses and observations from Mr. Gordon Robilliard, Entrix, Inc.

- Cooperative assessments, Mr. Robilliard noted, are a good evolution from confrontational, but are still not what he'd call "collaborative." Collaborative, he said, means at the same table at the same time, with the same goals and objectives, resulting in open communication. Trust among participants is critical, yet it's not always there, he noted.
- Regarding baseline data, he pointed out that it's probably more realistic to use a nearby reference area. He distinguished between baseline and base point data, suggesting that the latter are more common. Acceptability of baseline data is also a function of how collaborative an assessment is.
- Natural variability is seldom adequately documented in baseline or for quantitative assessment of injuries or service losses, Mr. Robilliard pointed out.
- Regarding the question of essential data, he suggested determination of both the temporal and spatial distribution and amount of oil, on the water and the shoreline.
- Mr. Robilliard also recommended sampling of neat oil from the tank, truck, or pipeline, for purposes of comparison.
- It's also important to determine where transient creatures including larvae are at the time of the spill.
- HEA/REA is a useful negotiation tool, which works in a collaborative setting, but he doubts whether it would hold up in court. Mr. Robilliard stated that HEA/REA requires professional judgment, relevant empirical experience, and TRUST, since hard data are often limited. It works well when applied to a "most probable" scenario, whereas the most conservative "what if" scenarios result in a larger range of damages. He did note that the number of positive examples and application is increasing.

Responses and observations from Mr. David Chapman, NOAA

- Mr. Chapman stated that we have come a long way in the arena of cooperative NRDAs. In fact, in the oil spill arena they are becoming common place. The Oil Pollution Act of 1990, which was an outcome of that "oh so uncooperative assessment," the Exxon Valdez spill, put a strong emphasis on the Trustees offering to work cooperatively with the Responsible Parties. NOAA regulations for OPA strongly emphasized the cooperative assessment approach.
- "It's still not clear yet whether we are getting to settlements quicker, or that restoration is happening sooner," he said, "but my feelings from working on a number of them is that it's a better approach to the problem." It probably reduces the overall amount of money spent on the assessments, brings the restoration to the forefront, and may even create a more balanced assessment, he noted.
- There is no strict definition of what a cooperative damage assessment is, Mr. Chapman said. But some of the common themes are: joint development of study plans, sharing of data, funding for

Trustees, and addressing uncertainty in the data through either stipulations or the use of reasonable worse case scenarios.

- Mr. Chapman stated that the second thing that has dramatically changed in the NRDA arena is the focus on restoration. "I feel that bringing the end goal of restoration into the very earliest discussion of a specific incident has probably done more to move NRDAs forward and limit the amount of extraneous discussion than any other single change," he commented. "The ultimate goal of the process is to restore the natural resources and services that were lost as a result of the spill. Often in the past we would fight for years to get damages based on some valuation of the resources or services, only to find out later that we really didn't know what types of restoration to do, or if we had enough money to effectively undertake adequate restoration actions. Moving the restoration discussion up front, ensures we won't find ourselves in this situation, and keeps everyone involved focused on the end goal."
- He further stated that there are a lot of opportunities early in a spill to mitigate some of the potential injuries through emergency restoration actions. And, since much of the same equipment and manpower necessary for restoration is often mobilized during the response, it makes sense to try and capitalize on these resources.
- One hitch to this very early restoration may be the question of how much credit the RPs will get for the actions, he noted. Typically the Trustees can say "we'll take it into consideration" but can't say exactly how much credit will be given. Often, it's a leap of faith on the part of the RP as to how much credit they will ultimately get, but more and more we see them offering to do it. It makes a lot of sense, it may very well minimize the injury, it gets restoration started sooner, and it's good press. He feels that, overall, the Trustees have done a good job in ensuring that adequate credit has been given for early restoration actions.
- "If we have moved into an era of cooperative assessments focused on restoration, does this mean that everything is working well?" Mr. Chapman asked. "In the arena of OPA spills," he replied, "we can work on is getting the process done more quickly." There is a fairly clear process for an assessment for an OPA spill, he noted, and the standards are becoming clearer regarding NPFC payment on claims. To some degree the uncertainty of the courts has been reduced. Knowing the process and standards should help in reducing the average time it takes to get an oil spill claim settled, which is one goal of NOAA's NRDA program.
- Much of what has been learned in the areas of cooperative assessments and restoration focus can be, and in some cases has been applied to CERCLA cases, he said. However, we have not moved as far as in OPA cases. And, there are additional challenges, he noted. The CERCLA statue and regulations are not as clear regarding the applicability of restoration based claims. Just as important is the fact that the contamination scenarios and science necessary to reliably tease out the effects is much more complicated. And typically there is much more at stake in these cases; we are talking bigger areas, longer injury scenarios and overall, more dollars at stake. Without a backstop fund to use, there is a greater likelihood of ending up in court in a CERCLA process.
- Regarding the question of whether cooperative assessments produce better outcomes, Mr. Chapman said that it is not clear yet if the overall outcome is better. The process is certainly better, and the probability of going to court is much lower with a cooperative assessment. It gets a lot of the issues moved to the front of the discussion, rather than leaving them unresolved. It does add additional work for the Trustees during the initial stages of a spill to coordinate with the RPs, and this may affect the overall ability of the Trustees to get out in the field.
- Regarding the questions of how to deal with uncertainty in data (quality, accuracy), he replied that the cooperative process allows for incorporating data uncertainties more directly into the process. We can identify where data are uncertain, and make decisions about collecting additional information to reduce the uncertainty or simply stipulate to agree to live with a certain level of uncertainty. Also, we can incorporate a range of data into the analysis, which is one common way of dealing with uncertainty. If the effect of uncertainty on the overall scale of restoration is

considered, it allows the Trustees and RPs to evaluate just how much uncertainty they can tolerate.

- Asked to reflect on the role of consultants during this phase, Mr. Chapman pointed out that consultants are a definite part of the NRDA process. Both the RPs and Trustees use them in most aspects of the assessments. One issue the Trustees often have, however, is identifying who is speaking for the RP, and ensuring that there is clear communication between consultants and their clients on either side.
- What type of pre-incident and post-incident but pre-oiling data should be collected? Mr. Chapman listed:
    - Existence of animals in area;
    - Bird estimates and counts;
    - Recreational activities; and
    - Water samples.
- Exposure data are usually some of the most important post-incident data, specifically the extent of the spill area, and the resources that have been oiled, he noted. This includes the existence of animals in the area, birds in the area, and collected birds, as well as recreational activities that commonly occur in the area.
- In response to the question of what data/information has proved to be most/least useful, he listed literature data, local experts, recent pre-incident collections, and incident specific collections. Incident specific data collections are probably the most useful data available.
- One concern with pre-incident data is how current it is, and whether will it help in identifying baseline conditions. Advance collection of baseline data is most useful where conditions are stable and don't change quickly. One aspect of baseline data that should be emphasized is the health of bird and mammal populations.
- On the other hand, he noted that good advance baseline data may activate "Murphy's Law" and ensure that a spill won't happen there!
- On the topic of the strengths and weaknesses of HEA/REA for determining damages, Mr. Chapman stated that HEA has become a very useful tool in NRDA. However it is only as good as the information put in, he explained. One needs to be very careful in putting too much weight on the results, if the input data is shaky. One of the strengths is its ability to evaluate uncertainty in data quickly in terms out outcomes. Also, it helps in identifying areas where better data are needed. For the most case, the HEAs are fairly transparent. He noted that the HEA tool has been supported in the courts as an appropriate method to determine compensatory restoration.
- During questions, Mr. Chapman was asked whether NRDA investigators used the wildlife forensics lab in Ashland, Oregon. He replied that they usually did not, since that lab was kept busy with international work and wasn't as geared up for large oil spills. Bird carcasses are usually sent to a Fish and Wildlife lab in Wisconsin, he noted, or the OSPR lab in California.
- Further on the topic of data, Mr. Chapman also stated that it's important to identify the perimeters of a spill's impact, as well as the percentage of impact within the perimeters. Similarly, it's important to determine the total population size of any impacted species, as well as the number impacted.
- For these reasons, NRDA researchers go beyond the spill area itself and are different than the SCAT teams in that aspect. Mr. Chapman noted that NOAA's Scientific Support Coordinators can incorporate NRDA information into their advice to the response teams. He further stated that NOAA is drafting a rule to clarify the role of cleanup versus NRDA.
- During later discussions, Mr. Chapman also pointed out that the Trustee/industry cooperation model used for OPA 90 NRDA is actually based on a successful CERCLA model.

Trustee/Industry Panel #2: Settlements and Restoration

General questions/issues speakers were invited to address:

- ➔ Role of consultants
- ➔ Role of attorneys
- ➔ How can we speed up the process and get to restoration quicker?

Panel #2 Pair A: Focus on Settlement

Questions:

- ➔ Discuss personnel, management, and legal input changes that occur as incidents transition from injury studies to settlement discussion to settlement to restoration implementation.
- ➔ Discuss the following questions in terms of how you would suggest the outcome be improved: Which cases reached equitable settlements? Which did not? Why?

Responses and observations from Ms. Kathy Verrue-Slater, Office of Spill Prevention & Response, CA Fish & Game

- Ms. Verrue-Slater presented a diagram of the NRDA process beginning with ephemeral data collection and moving on to injury determination and calculating compensatory restoration. "Once we have determined the compensatory restoration needed," she said, "we typically move into settlement discussions. After settlement, the Trustees develop and finalize the restoration plan and commence implementation. Although the focus for today's discussion is on settlements, she noted that she would also be talking about many of the activities leading up to the settlement negotiations.
- Regarding the role of attorneys in the settlement phase, she noted that a preliminary role of the attorneys is to develop an agreement with the RP to conduct cooperative injury studies and ensure that the RP is willing to pay for these studies. The studies are developed by the technical staff and/or consultants. Trustee attorneys work with the technical staff to evaluate whether outside experts are needed to conduct the studies and focus on any needed contracts. In terms of the studies, the attorney's focus is largely to review the studies and to help ensure that the studies proposed and associated costs are necessary and reasonable in accordance with the NRDA regulations. Attorneys also consider whether there are sufficient studies to be incorporated into the Administrative Record in order to account to the public.
- As the process moves into settlement negotiations, she stated that attorneys focus largely upon the strength of the data and interpretations developed by each side. Attorneys will be focused on whether the restoration/settlement offer fully compensates for the injured resources and is justified, and would also evaluate any weaknesses and litigation risks as well.
- Regarding the role of technical personnel, Ms. Verrue-Slater explained that they must evaluate the initial response data and determine what studies are needed. They are very focused on developing a suite of appropriate studies and reviewing Scopes of Work etc. During the settlement phase, technical personnel are largely focused on identifying appropriate restoration projects for injured resources and scaling those projects. Generally, technical personnel focus on developing the supporting scientific arguments for the restoration/offer.
- Consultants, she said, help prepare Scopes of Work and make recommendations regarding studies etc. During settlement negotiations the Trustees' consultants may also be required to make presentations.
- As the phases shift from settlement to restoration, Ms. Verrue-Slater explained, attorneys would be involved in: drafting the settlement documents and establishing any necessary accounts; establishing a Trustee Council tasked with restoration planning and implementation; and ensuring that the restoration planning process meets NEPA, CEQA, and OPA requirements. The attorneys would then primarily ensure that the restoration plan complies with the terms of the settlement.

- The technical staffs' focus is on further developing the projects and preparing the restoration plan. The Trustee staff would then oversee implementation and monitor progress.
- Consultants may also be used to assist with the restoration planning and implementation process during this phase.
- Ms. Verrue-Slater noted that, to the extent the parties are able to carry out cooperative studies, it provides a single set of data to work from. In some instances both sides may retain the right to separately interpret the jointly collected data, but it is helpful to at least start working from a common data set. Being able to appreciate and respect the other side's concerns is very helpful in conducting successful negotiations, she stated, and being able to reach agreement on some of the resource impacts helps to build trust.
- In her opinion, the use of HEAs and REAs as a tool for scaling projects is extremely helpful in achieving a settlement. Its use is supported by the NOAA NRDA rule. Furthermore, she noted that it allows both sides to talk the same language and provides an opportunity to narrow the points of disagreement and to see those areas where we are in agreement.
- Speaking further to Resource Equivalency Analysis (REA), she stated that one advantage is that compensation is focused on habitat or resource replacement projects verses dollars, and it utilizes the inputs from the assessment and restoration planning. REA calculates compensation in units of habitat or resources. She provided an example of REA as used for a Riparian Corridor. In this example, the restoration option preferred for the resource primarily affected was protection of habitat via acquisition.
- In another example of injury to instream biota, she showed that the HEA debit analysis is based on the number of stream miles oiled. Then a percent injury is determined by looking at the impacts to the aquatic organisms and waterbirds, where full recovery is assumed after Y years, the result is X stream mile years of habitat services lost.
- First an appropriate restoration project must be identified, she explained. In this example protection of the stream corridor was most beneficial for the endangered fish species impacted. The HEA analysis estimated that acquisition of XX miles of stream river corridor would compensate for the loss of X stream mile years. The next step is determining acreage needed. This is determined by looking at the width of the corridor. Then the average cost per acre is determined. Multiplying that by the number of acres needed, the result gives the total needed to compensate for the injured resources.
- From a Trustee's perspective, settlement considerations include public trust responsibility and accountability, integrity of the administrative record, the burden of proof, and litigation risks, costs, and delays.

Responses and observations from Mr. Gene Mancini, E.R. Mancini & Associates

- Mr. Mancini opened his presentation by noting that NRDA is "like herding cats!" Focusing on the settlement phase, he spoke about the roles and responsibilities of consultants, attorneys, and the RP's managers with the objective of expediting restoration.
- Mr. Mancini explained that principle consultant disciplines include chronological documentation, chemistry, biology, ecology, toxicology, and economics. He noted that a consultant's role can vary depending on whether they're working for a Trustee or an RP, but generally cover the following range:
    - Advisor
    - Technical specialist/analyst
    - Interpreter/translator
    - Critical reviewer
    - Mediator/Facilitator – to get all the issues on the table
- Mr. Mancini outlined the basic transition phases of NRDA as injury assessment and quantification (including baseline quantification, service reduction, and damage calculation), settlement (including NRD, cost recovery, restoration planning, fines/penalties), restoration planning, and actual restoration.

- A successful settlement requires that participants exhibit rational flexibility, be capable of objective technical debate/discussion, demonstrate reciprocal trust, and maintain a focus on settlement as a goal, he explained. Obdurate or threatening behavior, an obsession with money versus restoration, behaving in a punitive fashion, or having unrealistic expectations will be counterproductive to reaching that goal, he promised.
- Mr. Mancini presented an HEA chart showing Trustee claims and RP alternative proposals for woody vegetation, herbaceous vegetation, and river habitat injuries. He then stated that Habitat Equivalency Analysis (HEA) is a useful contrivance to accomplish settlement when potential litigants fundamentally disagree.
- To close on a provocative note, Mr. Mancini pointed out that the NRDA statute was written by attorneys in anticipation of litigation….but it's good to be respectful of one another anyway!

Panel #2 Pair B: Focus on Restoration
Questions:

➔ Should industry be more or less involved in restoration planning, restoration implementation, and/or restoration monitoring? Will that be likely to increase or decrease the time to attain successful restoration actions?
➔ Value and utility of regional restoration plans? Should industry and Trustees together promote developing regional restoration plans and agree to put settlement funds into non-injury site or injured critter specific restoration actions?
➔ Value and utility of compensation tables? The good, the bad, and the ugly?

Responses and observations from Mr. Dan Welsh, US Fish and Wildlife Service

- Mr. Welsh replied to the first question by observing that OPA's NRDA restoration regulations encourage cooperation. As examples of cooperative restoration efforts in California, he cited the M/V *Kure*, the M/V *Stuyvesant*, and East Walker River restorations.
- As to whether industry involvement in a restoration would increase or decrease overall project time, he noted that "the correct answer is…all of the above." Outcomes such as total restoration time are very case specific, so the effect of one variable is difficult to predict. Mr. Welsh recommended increasing industry involvement when the RP has engineers or other staff able to design restoration projects, or when the RP owns the land where the restoration will be done, or if the RP owns equipment needed for the restoration project.
- On the other hand, he noted, the RP's role should be reduced if Trustees are adequately staffed and/or equipped to carry out restoration, own the land where the restoration is to be implemented, or a restoration project is affected by, or might affect other resource management issues.
- Regarding the value and utility of regional restoration plans, Mr. Welsh felt that both Trustees and industry should promote their development. Moreover, any existing plans that would be the equivalent of regional restoration plans should be identified. Endangered species recovery plans are an example, he said.
- During later discussion, the question was raised as to how similar sites in a regional restoration plan should be to the originally damaged site. Should they involve the same species? Although we don't know which impact to a threatened or endangered species might push it over the brink of extinction, the hope is that restoration will improve species viability. It was pointed out that we should think in terms of "resource" restoration plans rather than "regional" restoration plans. Especially with transient species like birds, the best projects may not be local to the spill site. On the other hand, restoration projects removed from the spill site need to be explained to local people who want their environment restored. Every restoration agreement, one participant pointed out, should be justified on an environmental basis.
- Compensation tables are a potentially useful tool, Mr. Welsh stated, since they can expedite the restoration process. By virtue of their generic nature, however, their accuracy and applicability to the unique circumstances of a spill must be weighed. If compensation is determined strictly by volume of oil spilled, for instance, this may not address the actual cost of multiple resource

damages. Trustees should retain the option to use more traditional NRDA per the OPA 90 regulations.

Responses and observations from Mr. Mike Ammann, Chevron/Texaco

- Wearing his camouflage helmet in case the flak started to fly, Mr. Amman noted that whether industry takes an active role in restoration will be decided on a case-by-case basis. Usually it's in the RP's business interests to conduct the restoration because RPs generally can do the work quicker and at less cost than Trustees. Another advantage of the RPs taking an active role in restoration is that it can promote a partnership attitude between the RP and the Trustees.
- Asked during Q&A whether industry is really interested in getting more involved, he replied that he would want specific performance criteria to be developed in order to clarify expectations. The RP may not want to be involved if they don't own the impacted property. A representative from P&I clubs stated that they would be interested if there were a financial benefit and more control over project conclusion.
- Mr. Ammann stated that the idea of regional restoration planning is generally a good idea. Although this view may not represent the industry position, more PRPs are recognizing the benefits (e.g., flexibility in locating restoration projects) of regional restoration planning. Regional restoration sites identified in advance can aid in settling the case sooner with a resulting reduction in transaction costs. The idea is especially good in areas like San Francisco Bay with losses of historic wetlands are approaching 90%.
- He stated that his company is familiar with compensation tables, but doesn't have a lot of experience with them other than that gained during drills in states that use compensation tables like Florida and Washington. He noted that Washington has a process for determining whether compensation tables are appropriate for an incident. The benefits of using a comp table include quick resolution of the case and a reduction in transaction costs. A potential downside is that compensation tables may over or under estimate the level of injury.
- There are several challenges, he said. These include being able to "close the deal,' unreasonable expectations by any participants, and the question of "Why trust people on the other side?"
- Mr. Ammann recommended the following Improvements to the NRDA process:
  1. Use data quality objectives to frame the right questions to ask, and to identify the work/studies that are required to answer those questions. Data quality objectives should be discussed at the very beginning of an assessment.
  2. Understand the needs of the respective constituents of the parties involved in the process, whether agency, industry, or the public.
  3. Select reasonable approaches to manage uncertainty; data quality objectives should help with this. For example, one way to manage uncertainty is to build it into the scaling of the restoration project. Such a process helps to avoid doing studies with little return on the investment.
  4. The first meeting is critical. Consider limiting that meeting to actual employees of the RP and the Trustees; avoid bringing lawyers and consultants to the first meeting. Use the first meeting to develop a game plan.
  5. Focus on restoration.
  6. Be flexible and creative.
  7. Agree up front as to what "cooperation" means. For example, cooperation might mean sharing data or that both parties having equal access to consultants, etc.

Case Study: The Apex Houston Settlement. Presented by Mr. Mike Parker, San Francisco Bay National Wildlife Refuge

- Mr. Parker commented that there was considerable disagreement in the beginning of this restoration project, since the suggested approach was unique.
- He explained that common murres float in large “rafts” on the open ocean, so are very susceptible to oiling. 3000 murres were observed on Devils Slide Rock south of the entrance to San Francisco Bay in 1980; none were observed after the Apex Houston oil spill occurred in that area in 1986.
- The project proposal was to use social attraction methods to bring murres back to Devils Slide Rock, specifically decoys and bird calls. The decoys have to be put out before December. Mr. Parker showed both a video and slides which made it clear that installng this equipment a steep rock in rolling seas was not for the faint of heart.
- Six breeding pairs were observed on the rock during the first year of the project; 100 breeding pairs were nesting there after ten years. The total number of fledgling chicks is also increasing every year. The total population count in 2001 was 226. Devils Slide Rock is now considered comparable to other colonies in the area.
- Mr. Parker explained that 100 breeding pairs is the minimum for a self-sustaining murre population, but a larger population than that is desirable for survival, since it’s more resilient to predation. He noted that the common murre population as a whole is increasing in this area of the California coast.
- The team continuing to put out decoys, but the number has been reduced by almost 50%, from 400 to 220.
- Mr. Parker acknowledged the support of the Trustee Council, the San Francisco National Wildlife Refuge, the National Audubon Society, Humboldt State University, and the US Geological Survey.

Summary Comments and Observations of Dr. Roger Helm, Roundtable Moderator

- Dr. Helm observed that the NRDA process on the West Coast has been significantly improving in recent years due to progress in communication between and among Trustees and industry. Clear demonstrations of this improved communication are seen in the areas of increased cooperation and collaboration, and in a focus on restoration rather than monetary damages.
- He identified the following examples of increased Cooperation/Collaboration:
    - Information exchange: relevant and previously proprietary documents are being exchanged;
    - Trust building: extensive dialogue and regular meetings among Trustees and with industry;
    - Both Trustees and industry representatives have found extensive areas of agreement; and
    - Recent case examples demonstrate progress; these include Whatcom Creek, East Walker River, the M/V *Kure*, and the M/V *Stuyvesant*.
- Dr. Helm noted that issues which have been agreed to as the injury and settlement process progresses should be formalized or documented to promote forward progress, especially since participants may change over time and completion of the injury assessment, damages claim, and restoration phases may take several years.
- Changes in the types of restoration projects implemented by Trustees may occur through time as a result of public input during the comment phase. The Trustees in some recent potentially controversial cases have added a scoping step that allows public input into the restoration project selection process before a final agreement is reached.
- With regard to restoration, he stated that damage claims to responsible parties are more frequently being made in "a currency other than currency," referring to restoration rather than dollars.
- He observed that everyone expressed general support for expedited injury assessment in order to get to restoration as soon as possible. He noted, however, that if insufficient injury data has been collected and little specificity exists in the restoration Consent Decree, progress on restoration may initially be slow due to uncertainly on the part of the Trustee Council and the public, including local governments, as to what are appropriate restoration projects.
- Other participants noted that most local governments are not Trustees, so it's usually the responsibility of state Trustees to liaison with local governments and represent their concerns.
- Dr. Helm reviewed the following important points made during the roundtable discussions:
    - It's important to clearly establish both the area of spill exposure and the area not contaminated, particularly the outer limits of the exposure area.
    - The entire area searched for oil or oiled wildlife must be documented regardless of whether oil or oiled wildlife were found;
    - Useful baseline data seldom exists, and where it does, spills are exceedingly rare;
    - Information on habitat quality and wildlife quantity collected just prior to exposure/contamination is very valuable for NRDA, and should be collected and photo-documented.
    - Regional restoration plans and all other potential restoration options (e.g., Endangered Species Recovery Plans, local government or non-profit restoration plans, Habitat Conservation Plans, etc.) should all be considered by the Trustees in developing restoration options during the injury assessment/restoration planning phases following a spill.
    - NRDA teams typically collect highly detailed data that can be valuable in directing response efforts and communication between NRDA teams and response personnel is necessary. It usually occurs through the Planning Section of the Incident Command System.

- A short list (1 – 2 pages) describing the crucial questions and data needs for NRDA should be developed by Trustees and industry in the early stages of a spill in order to ensure that critical data are collected.

Other comments made by Roundtable participants and Notes of Interest

- The Washington Department of Ecology has a policy that their staff will serve as the lead for the environmental unit in an ICS structure during spill response. As a Trustee, this provides consistency with the NRDA efforts.
- The California Office of Spill Prevention and Response (OSPR) uses a spill historian to document spill events, but have not yet incorporated this technique into NRDA.
- GPS data should be used to document location of exposed areas and wildlife.
- The international P&I clubs are interested in developing MOUs with other Trustees as they have with NOAA.*
- Copies of a handout titled "Joint Trustee and Industry Cooperative Pre-spill and NRDA Planning Effort" (JAT) by Dr. Helm and Michael Ammann was provided to participants.*

* * * * *

* Copies of these handouts may be obtained by contacting Jean Cameron at the Pacific States/BC Oil Spill Task Force office address/phone/fax/or email below:

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ADDENDUM

The following NRDA research projects have been proposed by OSPR and endorsed by the Pacific States/BC Oil Spill Task Force:

Automated Wildlife Search and Collection Procedure

The goal of the project would be to develop an automated process for the collection, assessment, categorization and reporting of injured wildlife search and collection data. Specific objectives would to (1) develop a hand-held miniature computer and GPS unit that can be taken into the field and used by search and collections teams to record required information (currently this is being done with paper records); (2) develop appropriate software to manage and assess the collected data; (3) develop an electronic Chain-of-Custody protocol; (4) develop an electronic tracking system for oiled wildlife submitted for rehabilitation; (5) incorporate download electronic data into routine forms used in the intake and processing of oiled wildlife; (6) develop a real-time information link for IC, Wildlife Search and Collection Coordinator, Spill Response Coordinator and Wildlife Operations Branch Chief. (Primary agency contact: California Office of Spill Prevention and Response)

Bird Deposition Study

Many oil spills result in dead seabirds. Because not all impacted seabirds are recovered, the actual number impacted must be estimated from the birds that are found. One area that causes uncertainty in injury assessment is the deposition rate of oiled birds in the vicinity of reflective beaches (i.e. cliffs and bluffs that are swept at high tide or all the time). These birds may become beat up in the surf and sink, they may be driven by currents to adjacent sandy beaches, they may strand and be washed out to sea, or they may potentially rewash on adjacent beaches. This study will examine the fate of such birds through experimentation at beaches with varying characteristics. (Primary agency contact: California Office of Spill Prevention and Response)

Restoration Meta-Analysis of Ecological Benefits and Financial Costs

The rise in the use of Habitat and Resource Equivalency Analysis (HEA and REA) has aided greatly in allowing RP's and Trustees to quantify resource injuries and calculate appropriate restoration. However, this method places a premium on information regarding restoration projects. Such information regarding the ecological benefits (both in degree and duration) and the costs of the projects is widely scattered and difficult to obtain. This project would collate and centralize available data, summarizing it in a single document. Projects will be looked at according to the various habitat types they benefit (e.g., saltmarsh, freshwater wetlands, riparian corridors, instream biota-- high and low gradient). (Primary agency contact: California Office of Spill Prevention and Response)

Further inquiries regarding these proposals should be made to:

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