

Coordination in the Natural Resource Damage Assessment Process: General Tools and Mechanisms

Environmental Law Institute



ENVIRONMENTAL
LAW • INSTITUTE®



March 2018

The Environmental Law Institute (ELI) makes law work for people, places, and the planet. Since 1969, ELI has played a pivotal role in shaping the fields of environmental law, policy, and management, domestically and abroad. Today, in our fifth decade, we are an internationally recognized, nonpartisan research and education center working to strengthen environmental protection by improving law and governance worldwide.

ELI staff contributing to this paper include Staff Attorney Amy Streitwieser, Senior Attorney Teresa Chan, Senior Attorney Jay Austin, and Research Associate Azi Akpan. The authors would like to thank our partners and other colleagues, who have provided invaluable ideas for and input into this paper. Funding for research and drafting was provided by the Walton Family Foundation.

Cover Design by Davonne Flanagan. Cover Photo by Helen Rose Patterson, National Wildlife Federation (cropped from original).

Coordination in the Natural Resource Damage Assessment Process:
General Tools and Mechanisms.

© 2018 Environmental Law Institute®, Washington, D.C. All rights reserved.

Introduction

As a result of the *Deepwater Horizon* oil spill, a number of different funding processes have been put in place to help restore and recover the Gulf of Mexico. The three main ones are the natural resource damage assessment (NRDA), the RESTORE Act, and the National Fish & Wildlife Foundation (NFWF) Gulf Environmental Benefit Fund (GEBF), which together will distribute over \$16 billion. Each of these processes has its own objectives, timelines, governance structure, and opportunities for the public to engage. These processes also involve a number of different federal, state, and other entities. At the same time, there are a number of federal, state, and local programs that were in place prior to the spill (see Figure 1). Coordination among these varied efforts will therefore be essential.¹



Figure 1: Complexity of Gulf restoration and recovery.

This paper focuses on some of the tools and mechanisms that are available to help coordinate one of these efforts – the *Deepwater Horizon* NRDA. The NRDA process is being managed by a group of federal and state agency representatives (called “trustees”). Responsibilities are divided among three main groups: a Gulf-wide Trustee Council, area-focused Trustee Implementation Groups (TIGs), and individual trustee agencies (see Figure 2).

¹ As the Gulf Coast Ecosystem Restoration Council (RESTORE Council) noted, “Gulf restoration funding is distributed among a number of entities and programs, each with its own set of guidelines and decision processes. Inter-governmental coordination, engagement, and transparency are essential for ensuring that the available funding is used in the most effective and efficient way possible.” RESTORE Council, COMPREHENSIVE PLAN UPDATE 2016: RESTORING THE GULF COAST’S ECOSYSTEM AND ECONOMY at 5 (2016) (hereinafter “COMPREHENSIVE PLAN UPDATE”), available at: https://restorethegulf.gov/sites/default/files/CO-PL_20161208_CompPlanUpdate_English.pdf.

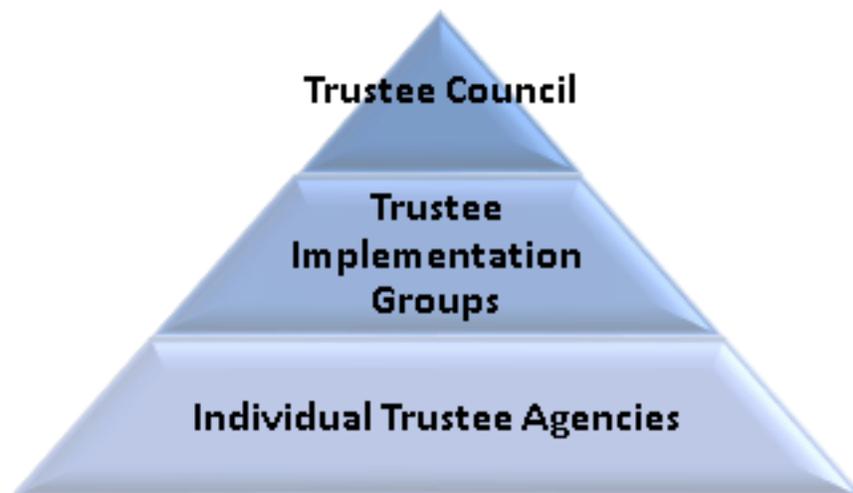


Figure 2: Trustee governance structure.

Each of these groups has different responsibilities, but most decisions about restoration moving forward will be made by the TIGs. There is one TIG for each of eight different “restoration areas” (one covering each Gulf state, open ocean, region-wide, and “unknown conditions”) (see Figure 3).



Figure 3: Trustee implementation groups (adapted from PDARP, Figure 7.2-1).

Purpose and Intended Audience

This paper surveys some of the general tools and mechanisms that are available to the NRDA trustees to help coordinate their activities both internally (within the NRDA program) and externally (with other Gulf restoration programs). It is primarily targeted at members of the general public, particularly those participating in the *Deepwater Horizon* NRDA process, who want to learn more about trustee coordination.

It is important to note that the trustees are already using a number of the tools and mechanisms we highlight in this paper. While we have not attempted to catalogue all of the ways that the trustees have used these tools and mechanisms, we provide some examples of how they have been used in this and other large-scale restoration efforts.

Why is coordination important?

Coordination is important for a number of reasons. Some of these include:

- **Avoids duplication of efforts:** coordination can help ensure that the trustees are not duplicating their efforts or the efforts of other restoration programs. For example, coordination can help ensure that different restoration programs are not proceeding in parallel in the same geographic area, or in regards to certain ecosystems. It can also help to clarify any potential misunderstandings about another entity’s restoration plans or activities.
- **Leverages funds and activities:** coordination can lead to the leveraging of funds within and across restoration programs. As the RESTORE Council recognized in its Initial Funded Priorities List, “[n]either the Council nor any of its public or private restoration partners have sufficient funds to fully address the vast ecological challenges facing the Gulf. Effective leveraging of existing resources is critical for maximizing the ‘bang’ for each coastal restoration ‘buck.’”² Aside from funding, coordination can also lead to the leveraging of activities across the Gulf (e.g., scientific research activities).³
- **Keeps project costs down:** coordination can also help keep project costs down. For example, coordination efforts can help sequence projects and ensure that multiple projects do not move to implementation all at the same time. This will help control costs since it is possible that “the roll-out of multiple projects in all five Gulf Coast states at once will both drive up construction prices and force delays in the availability of needed equipment.”⁴



Photo by ELI Gulf Team.

² RESTORE Council, INITIAL FUNDED PRIORITIES LIST at 10 (updated Apr. 7, 2016), available at: <https://www.restorethegulf.gov/council-selected-restoration-component/initial-2015-funded-priorities-list>.

³ As the Mississippi Environment Focus Group notes, in addition to leveraging funds, “existing projects, potential partnerships with public and private entities, and technical and scientific expertise” should be leveraged. Mississippi Environment Focus Group, 14 GUIDING PRINCIPLES FOR INVESTING DEEPWATER HORIZON FUNDS IN MISSISSIPPI, on file with Environmental Law Institute.

⁴ Mark Schleifstein, “Spending 16.5 billion BP spill money will require careful planning, officials say,” THE TIMES PICAYUNE (updated Feb. 19, 2016), citing coastal engineer Cameron Perry, available at: www.nola.com.

Coordination may therefore lead to better restoration outcomes. Indeed, the NRDA trustees made this point in their Programmatic Damage Assessment and Restoration Plan and Programmatic Environmental Impact Statement (“PDARP”). Addressing coordination “with other restoration programs, including other *Deepwater Horizon* restoration programs,” the trustees stated: “[c]oordination among programs will promote successful implementation of [the PDARP] and optimize ecosystem recovery within the Gulf.”⁵

What tools and mechanisms are available for coordination?

There are a number of tools and mechanisms available to the NRDA trustees to help them coordinate among themselves and with external entities. This paper provides an overview of some of these, highlighting examples of how they have been used in this and other large-scale restoration efforts. The first three sections are largely focused on tools and mechanisms that are set out in the trustees’ own documents (e.g., the Trustee Council Standard Operating Procedures (SOPs)): (1) communication tools and mechanisms; (2) work groups; and (3) an executive director and staff. The fourth section focuses on the idea of a region-wide coordinating body.

Note that, because there are many levels of coordination and numerous activities that could be coordinated, we have narrowed our focus in this paper. When we address external coordination, we are largely focused on coordination between the trustees and two other Gulf restoration programs: the RESTORE Act’s Gulf Coast Ecosystem Restoration Council (RESTORE Council) component and NFWF’s Gulf Environmental Benefit Fund. When we address internal coordination, we are largely focused on coordination among the various TIGs.



Photo by Helen Rose Patterson, National Wildlife Federation.

⁵ FINAL PROGRAMMATIC DAMAGE ASSESSMENT AND RESTORATION PLAN (PDARP) AND FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT STATEMENT (PEIS) at 7-16 to 7-17 (Feb. 2016) (hereinafter “PDARP”), available at: <http://www.gulfspillrestoration.noaa.gov/restoration-planning/gulf-plan>.

The Role of the Trustee Council in Coordination

As described in the Trustee Council Memorandum of Understanding, “[t]he Trustee Council is the executive body supporting the work of the [t]rustees when acting collectively...in coordinating and cooperating with respect to natural resources restoration.”⁶ In a March 2017 letter to the Trustee Council and TIGs, a number of groups working in the Gulf noted that “the Trustee Council maintains the important role of helping to coordinate among TIGs and across funding streams.”⁷

With regard to internal coordination, the PDARP notes that “[t]he Trustee Council’s function [is] primarily...to ensure coordination and efficiency across the TIGs by establishing procedures and practices needed to standardize or provide for consistency of some TIG activities.”⁸ As for external coordination, the PDARP indicates that “[t]he Trustee Council and TIGs share responsibility to coordinate with other restoration programs, including other *Deepwater Horizon* restoration programs.”⁹

1. Communication Tools and Mechanisms

While the overlap in membership across restoration programs and the TIGs may facilitate communications, there are also specific communication tools and mechanisms that the trustees can rely on to help them coordinate internally and with external entities. This section examines some of these opportunities.

Overlap in Membership

The overlap in membership across restoration programs and the TIGs may facilitate communications. With regard to the restoration programs, there is an overlap in the trustee and RESTORE Council memberships: the four federal agencies that are trustees in the NRDA process are also represented on the RESTORE Council.¹⁰ In

⁶ TRUSTEE COUNCIL MEMORANDUM OF UNDERSTANDING RELATING TO THE NATURAL RESOURCE DAMAGE ASSESSMENT AND RESTORATION RESULTING FROM THE DEEPWATER HORIZON MOBILE OFFSHORE DRILLING UNIT AND THE SUBSEA MACONDO WELL at 6 (2016), available at: <https://www.fws.gov/doiddata/dwh-ar-documents/774/DWH-AR0308813.pdf>.

⁷ Letter from Alabama Coastal Foundation et al. to the Trustee Council and Trustee Implementation Groups at 5 (Mar. 2017), available at: www.fws.gov/doiddata/dwh-ar-documents/1224/DWH-ARZ000088.pdf.

⁸ PDARP at 7-5.

⁹ PDARP at 7-16.

¹⁰ The federal trustees are the U.S. Department of Interior (represented by U.S. Fish & Wildlife Service, Bureau of Land Management, and National Park Service), U.S. Department of Commerce (represented by the National Oceanic and Atmospheric Administration), U.S. Environmental Protection Agency, and

addition, both the trustees and the RESTORE Council include representatives from the five Gulf states.¹¹ At the same time, although NFWF is a non-profit organization, its board of directors – which must approve restoration projects funded by the GEBF – includes the director of the U.S. Fish & Wildlife Service (FWS) and the administrator of the National Oceanic and Atmospheric Administration (NOAA).¹² Both FWS and NOAA participate in the NRDA process.¹³ Across the TIGs, there is also an overlap in membership: the four federal trustee agencies sit on each of the TIGs (see Figure 3).

While this overlap could facilitate communication and presumably coordination between the restoration programs and among the TIGs, it would likely be contingent on staff at the same agency, who are involved in different restoration programs (or, in the case of the TIGs, who participate on different TIGs), communicating regularly; the same staff participating in multiple restoration programs (or, in the case of the TIGs, sitting on multiple TIGs); or both. Accordingly, while important, the overlap in membership is unlikely to be sufficient in and of itself to lead to coordination.

Consultation Provisions

Certain provisions in the SOPs are intended to promote internal communications. For example, there is a section on “General Trustee Consultation.” That section indicates that “communication will be encouraged and afforded between Trustees above and beyond TIG membership,” so as “to promote a cooperative and collaborative approach to Gulf restoration...”¹⁴ The section goes on to describe “minimum expectations for such communications” – for the Trustee Council, TIGs, and Open Ocean TIG.



Photo by Helen Rose Patterson, NFWF.

U.S. Department of Agriculture. See PDARP at 1-5. The federal members of the RESTORE Council include representatives from those same agencies, as well as from the U.S. Departments of the Army and Homeland Security. See RESTORE Council, “People,” <http://www.restorethegulf.gov/people> (last accessed Feb. 28, 2018).

¹¹ The Environmental Law Institute explored the overlap in membership among the various *Deepwater Horizon* restoration processes in the paper we co-authored with the Tulane Institute on Water Resources Law & Policy: *FUNDING DEEPWATER HORIZON RESTORATION & RECOVERY: HOW MUCH, GOING WHERE, FOR WHAT?* (2014), available at: <http://eli-ocean.org/gulf/restoration-funding/>.

¹² See NFWF, “About NFWF,” <http://nfwf.org/gulf/Pages/About-NFWF.aspx> (last accessed Feb. 7, 2018).

¹³ FWS is one of three agencies that represent the Department of Interior, while NOAA represents the Department of Commerce. See PDARP at 1-5.

¹⁴ TRUSTEE COUNCIL STANDARD OPERATING PROCEDURES FOR IMPLEMENTATION OF THE NATURAL RESOURCE RESTORATION FOR THE DEEPWATER HORIZON (DWH) Oil Spill at 8.1 (revised Nov. 15, 2016) (hereinafter “SOPs”), available at: <http://www.gulfspillrestoration.noaa.gov/sites/default/files/DWH%20TC%20SOP%202.0%20with%20appendices.pdf>.

For the TIGs, the language is not mandatory: the SOPs state that the “TIGs should consider opportunities for consultation with [t]rustees that are not members of their TIG....”¹⁵ Moreover, the language refers to consultation at specific times and for a specific set of activities – “before noticing public meetings and initiating restoration plans.”¹⁶ Nevertheless, these are “minimum expectations,” and could be used as a starting point for consultation among the TIGs.

There are also “minimum expectations” that apply specifically to the Open Ocean TIG. Under the SOPs, the Open Ocean TIG is required to “inform relevant state Trustee(s) at the earliest opportunity after initial project identification of a project that could potentially affect a state [t]rustee’s jurisdiction, whether or not the project is within the state’s geographic boundaries.” In addition, the Open Ocean TIG must “coordinate with those state [t]rustee(s) regarding the proposed restoration activities” if that state trustee(s) requests it.¹⁷ While coordination is only required if an Open Ocean TIG project “could potentially affect a state [t]rustee’s jurisdiction” and if the state trustee requests it, these provisions promote coordination among the Open Ocean and other TIGs and could serve as a useful model for coordination among the TIGs more generally.

Consultation with External Entities

There are also consultation provisions that promote external coordination. Under the criminal plea agreements that BP and Transocean reached with the federal government, NFWF is set to receive over \$2.5 billion for “projects to remedy harm to resources” injured by the BP oil spill.¹⁸ NFWF must fulfill certain obligations under those plea agreements, including an obligation to consult: it is required to “consult with appropriate state resource managers, as well as federal resource managers...to identify projects and to maximize the environmental benefits of such projects.”¹⁹ As NFWF has noted, it “is consulting with natural resource management agencies in each of the five Gulf States and with [NOAA] and the U.S. [FWS]” in order to fulfill this obligation. NFWF also notes that “[t]hese agencies serve on both the Deepwater

¹⁵ SOPs at 8.1.2.

¹⁶ *Id.*

¹⁷ SOPs at 8.1.3.

¹⁸ *United States of America v. BP Exploration and Production, Inc., Guilty Plea Agreement*, Exhibit B, Paragraph 37(a) (Nov. 15, 2012), available at: <https://www.justice.gov/iso/opa/resources/43320121115143613990027.pdf>.

¹⁹ *Id.*

Horizon [NRDA] Trustee Council and the RESTORE Council, and their input will be the primary means through which project selection under the [GEBF] will be coordinated with similar activities under the [NRDA] and RESTORE programs.”²⁰

There are no similar provisions for direct consultation between the NRDA and RESTORE Council processes, though there are other tools and mechanisms available to them (see, for example, the section below on “Meetings”).

Point of Contact

The designated primary point of contact (POC) could provide additional support for coordination. Under the SOPs, each TIG is required to designate a POC. This role appears to be largely administrative: the POC is expected to “coordinate with the Trustee Council and the [Lead Administrative Trustee] to encourage consistency of TIG operations with [the] SOPs, including timely project reporting and submission of documents to the Administrative Record.”²¹

The same POC could, however, play a larger role in coordinating the trustees. For example, the POC could serve as the POC for the other TIGs (i.e., not just the POC for the Trustee Council and the Lead Administrative Trustee, but for the other TIGs too). Running most or all significant communications between the TIGs through their respective POCs could support coordination across restoration areas. For purposes of external coordination, the POCs could also act as the contacts for the other restoration programs.



Photo by Helen Rose Patterson, NWF.

²⁰ NFWF, “Gulf Environmental Benefit Fund: Frequently Asked Questions,” <http://www.nfwf.org/gulf/Pages/Gulf-FAQ.aspx> (last accessed Feb. 9, 2018). Note that a similar analysis of these consultation provisions was included in the paper we co-authored with the Tulane Institute on Water Resources Law & Policy. See *supra* note 11 at 35-36.

²¹ SOPs at 2.4.1.

Meetings

Another tool available to help the trustees coordinate is meetings. Some opportunities include:

Coordinating at Trustee Council and TIG Meetings: The SOPs provide that Trustee Council meetings and TIG meetings will occur “as frequently as they deem necessary for advancing their respective work.”²² While the SOPs do not include any provisions relating to meetings across TIGs,²³ all of the federal and state trustees are represented on the Trustee Council, as well as on the Region-wide TIG. Meetings of these groups therefore provide an opportunity for the trustees to coordinate across the TIGs (see box below on “Report-Outs”).²⁴

Inviting Other Restoration Programs to Trustee Meetings: Under the SOPs, members of the Trustee Council are allowed to “invite other non-Trustee attendees (e.g., RESTORE, NFWF staff)” to Trustee Council meetings, so long as “advance notice is given to, and consent received from, the rest of the Trustee Council members.”²⁵ The trustees appear to be doing this.²⁶ The SOPs also suggest that the TIGs could invite “non-Trustee attendees” to their meetings.²⁷

Participating in Meetings of Other Restoration Programs: The trustees could also take advantage of opportunities to participate in meetings organized by external entities. For example, the RESTORE Council plans to host what are being referred to as “coordination workshops.” More specifically, in the RESTORE Council’s Comprehensive Plan Update 2016, the Council committed to “[s]ponsor[ing]...meetings and workshops

²² SOPs at 3.2.2.

²³ As noted in the “Consultation Provisions” section above, there are consultation provisions that promote communications among the TIGs.

²⁴ For the federal trustees, in addition to sitting on each of the TIGs, they have agreed in their 2016 Memorandum of Understanding to meet “at least once every six months for a discussion of restoration progress, including practical dialogue about sharing and/or allocating responsibilities for TIG participation (‘periodic meetings’).” MEMORANDUM OF UNDERSTANDING AMONG THE FEDERAL NATURAL RESOURCE TRUSTEES FOR THE *DEEPWATER HORIZON* OIL SPILL (Mar. 2016), available at: <https://www.fws.gov/doiddata/dwh-ar-documents/774/DWH-ARZ000614.pdf>. These meetings provide the federal trustees another opportunity to coordinate. Note that the federal trustees adopted the Memorandum of Understanding to “document their mutual expectations regarding efficient coordination and collaboration with one another on the Trustee Council and the TIGs.” *Id.*

²⁵ SOPs at 3.2.1(a).

²⁶ For example, RESTORE Council staff participated in a Trustee Council meeting in July 2016. See “Attendees” from DWH TRUSTEE COUNCIL MEETING SUMMARY (July 13, 2016), available at: <http://www.gulfspillrestoration.noaa.gov/trustee-council-meeting-summaries/>.

²⁷ The SOPs indicate that “[n]otification of and attendance at all TIG meetings is as provided in 3.2.1(a) for the Trustee Council, unless otherwise agreed upon by consensus of the TIG.” SOPs at 3.2.1(b).

to foster coordination and collaboration among [its] members and [its] restoration partners (e.g., NRDA and NFWF).²⁸

Some of the anticipated outcomes of these workshops include:

- “[I]nvestigat[ing] how project funding across [the] various funding streams, without duplicating efforts, can maximize restoration outcomes.”
- “[E]nsur[ing] that Gulf restoration has the greatest impact possible due to the collaboration of [DWH]-related funding and other relevant programs in developing, funding, and implementing restoration strategies.”
- “[I]nform[ing] the identification of priority issues and outcomes in key watersheds/regions and future funding decisions, as well as the development of specific projects, programs, and partnerships to achieve those outcomes.”²⁹



Photo by Helen Rose Patterson, NFWF.

These workshops will provide a significant opportunity for the NRDA trustees to work with the RESTORE Council and others.

“Report-Outs” At Trustee Council Meetings

Notes from Trustee Council meetings indicate that the TIGs have been providing “report-outs,” where a TIG representative provides “updates” that are “for awareness and general activities and related discussion.”³⁰ Starting in November 2016, two TIGs have typically provided a report-out during each meeting, on a rotating basis.³¹ Some of the topics covered in the report-outs have included updates on restoration plan development, information about upcoming meetings and comment periods, and updates on specific projects.

²⁸ COMPREHENSIVE PLAN UPDATE at 17. The plan notes that while collaboration with many different entities is useful, “[i]n particular, there is a clear need to coordinate closely with other Gulf restoration and conservation funding efforts including NRDA, NFWF, and other federal programs.” *Id.* The plan also notes the RESTORE Council’s belief that “promoting collaboration and coordination ... will ultimately improve both the development and implementation of restoration activities under the Council-Selected Restoration Component.”

²⁹ *Id.*

³⁰ DWH TRUSTEE COUNCIL 10/24/16 CONFERENCE CALL SUMMARY (Oct. 24, 2016), available at: [http://www.gulfspillrestoration.noaa.gov/trustee-council-meeting-summaries/..](http://www.gulfspillrestoration.noaa.gov/trustee-council-meeting-summaries/)

³¹ See Gulf Spill Restoration, “Trustee Council Meeting Summaries,” <http://www.gulfspillrestoration.noaa.gov/trustee-council-meeting-summaries/>. The Cross-TIG Monitoring and Adaptive Management (MAM) work group, discussed in the next section, is also part of the report-out rotation. As of March 2018, the trustees had posted notes through the April 24, 2017 Trustee Council meeting; we have assumed that the report outs have continued since then.

2. Work Groups

Work groups are another tool the trustees can use to help them coordinate both internally and externally. Under the SOPs, “[t]he Trustee Council may form and task work groups or teams on an as-needed basis to address specific issues that may arise.”³² These work groups are not autonomous. They “act only at the direction of the Trustee Council and...have no independent decision-making authority.”³³

The Trustee Council has already established work groups. This includes the Cross-TIG Monitoring and Adaptive Management (MAM) work group, which is comprised of representatives “from each of the nine Trustee Council members able to reflect the perspectives and needs of each of the TIGs.”³⁵ The purpose of the work group is to “provide[] a forum for coordination on monitoring and adaptive management topics relevant to multiple [TIGs].”³⁶ The work group may also establish sub-work groups (referred to as “topic-specific work groups”) to the extent they are needed, which it appears to have done.³⁷

MAM Manual Released

In January 2018, the Cross-TIG MAM Work Group released its “Monitoring and Adaptive Management Procedures and Guidelines Manual Version 1.0.” The Manual is intended to “provide guidance and consistency in MAM-related activities for the Trustee Council, TIGs, and Implementing Trustees...”³⁴

With regard to internal coordination, the Cross-TIG MAM work group has been expressly structured to support it: there are “liaisons to each of the TIGs from within its membership,” which are intended “to further internal coordination on MAM issues....”³⁸ One way the liaisons do this is by “communicat[ing] TIG priorities and restoration

³² SOPs at 2.2.6.

³³ *Id.*

³⁴ Deepwater Horizon Natural Resource Damage Assessment Trustees, MONITORING AND ADAPTIVE MANAGEMENT PROCEDURES AND GUIDELINES MANUAL VERSION 1.0 (Dec. 2017), available at: http://www.gulfspillrestoration.noaa.gov/sites/default/files/2018_01_TC_MAM_Procedures_Guidelines_Manual_12-2017_508_c.pdf.

³⁵ SOPs at 10.1.2.

³⁶ Gulf Spill Restoration, “Cross-TIG Monitoring and Adaptive Management (MAM) work group,” <http://www.gulfspillrestoration.noaa.gov/cross-tig-monitoring-and-adaptive-management-mam-work-group> (last accessed Feb. 28, 2018).

³⁷ SOPs at 10.1.2. The Cross-TIG MAM work group appears to have formed some “sub-teams.” As noted in the Trustee Council Conference Call Summary notes from January 17, 2017: “The Cross-TIG MAM Working Group has established sub-teams focusing on specific approaches and restoration techniques to establish core parameters to determine how to measure programmatic performance.” See DWH TRUSTEE COUNCIL 1/17/17 CONFERENCE CALL SUMMARY (Jan. 17, 2017), available at: www.gulfspillrestoration.noaa.gov/sites/default/files/TC%20Call%20Summary%201-17-17_FINAL.pdf.

³⁸ DEEPWATER HORIZON RESTORATION PROJECT REPORT: CROSS-TIG MONITORING AND ADAPTIVE MANAGEMENT (MAM) WORK GROUP at 1 (Apr. 20, 2017), available at: https://pub-data.diver.orr.noaa.gov/restoration/Cross-TIG_Monitoring_ID71_2016_Annual_Report.pdf.

activities to the Cross-TIG MAM work group and communicat[ing] outputs of the Cross-TIG MAM work group to the TIG.”³⁹

Some of the Cross-TIG MAM work group’s responsibilities also support internal coordination. For example, the work group is required to “identify potential overlap in MAM priorities between the TIGs and Restoration Types and encourage and support coordination of similar data collection efforts across geographic boundaries.”⁴⁰

With regard to external coordination, the Cross-TIG MAM work group’s structure and responsibilities support coordination with external entities. To start, the work group has selected an “external coordination point of contact,” who “participates in existing restoration and monitoring coordination groups.”⁴¹ This could help the work group meet some of its responsibilities regarding external coordination, which include “identify[ing] opportunities to leverage resources with other restoration and science programs and collaborat[ing] on related MAM activities.”⁴²

The Cross-TIG MAM work group provides a useful model for how a work group might be structured to support both internal and external coordination. A similar work group –



Photo by ELI Gulf Team.

or multiple groups – could be created to, for example, coordinate project planning and implementation: a work group could be created for each restoration type where more than one TIG is receiving funding. Or work groups could be created for certain geographic areas that cross restoration areas (e.g., a watershed). Like the Cross-TIG MAM work group, these work groups could be structured to, and be given specific responsibilities that could, promote internal and external coordination.⁴³

³⁹ SOPs at 10.3.4(b).

⁴⁰ SOPs at 10.4.1.2

⁴¹ DEEPWATER HORIZON RESTORATION PROJECT REPORT: CROSS-TIG MONITORING AND ADAPTIVE MANAGEMENT (MAM) WORK GROUP, *supra* note 38.

⁴² SOPs at 10.3.5(a).

⁴³ Note that a similar idea has been suggested by other groups working in the Gulf. In a July 2016 letter to the Trustee Council, five groups suggested that the Trustee Council “creat[e] a work group that considers and develops [ideas] for how the Trustee Council could effectively coordinate with other DWH restoration programs.” Letter from Environmental Defense Fund et al. to the Deepwater Horizon NRDA Trustee Council at 2 (July 2016), available at: <https://www.fws.gov/doiddata/dwh-ar-documents/1224/DWH-ARZ000023.pdf>.

How can coordination be funded?

The NRDA trustees have indicated that “Administrative Oversight and Comprehensive Planning” funds are to be used for “non-project specific responsibilities.”⁴⁴ This could include coordination activities. At the same time, the trustees have specified how certain coordination activities could be funded:

- Under the “Restoration Implementation” section of the PDARP, it is noted that “TIG coordination across projects may be funded with administrative oversight and comprehensive planning funds allocated to each respective TIG.”⁴⁵
- Funding guidelines appended to the SOPs indicate that the Lead Administrative Trustee may use the monies allocated to the Region-wide TIG for Administrative Oversight and Comprehensive Planning for “[c]oordination, facilitation and logistical support for Trustee Council and TIG meetings.”⁴⁶
- For the Cross-TIG MAM work group, the SOPs provide that “[c]onducting Cross-TIG MAM work group operation and coordination activities” may be funded from the monies allocated to the Region-wide TIG for Monitoring and Adaptive Management.⁴⁷

3. Executive Director and Staff

Another tool potentially available to the trustees to help with internal and external coordination is the appointment of an executive director and dedicated staff. Under the PDARP, the trustees may establish a “permanent operations structure, such as an executive directorate to conduct the day-to-day operations of the [Trustee Council], promote coordination among its members, and facilitate voting among the [t]rustees.”⁴⁸

Such “permanent operations structures” have been used in the Gulf and at least one other large-scale restoration effort. In the Gulf, the RESTORE Council has a staff that includes an executive director and other staff members. As noted in that Council’s Standard Operating Procedures, the executive director “is responsible for the administrative and fiscal operations of the Council and its staff.”⁴⁹ The procedures list a number of duties of the executive director,⁵⁰ who can, in turn, “re-delegate or assign any

⁴⁴ PDARP at 7-4 to 5.

⁴⁵ PDARP at 7.4.1.

⁴⁶ SOPs, Appendix H.

⁴⁷ SOPs at 10.5.1(b)(8).

⁴⁸ PDARP at 7-8.

⁴⁹ RESTORE COUNCIL STANDARD OPERATING PROCEDURES at 3.2.3 (Mar. 3, 2016), available at: https://www.restorethegulf.gov/sites/default/files/GCERC_SOP_03032016_FOIA_General.pdf.

⁵⁰ *Id.* These duties include: “[s]upport[ing] internal administration of the Council, including upon request of a Council member, develop[ing] written issue papers for deliberation and decision by the Council” (*id.* at

and all [of these duties], in whole or in part, to Council staff, unless otherwise specified in the[] procedures.”⁵¹ As one organization has noted, in calling on the Trustee Council to hire its own executive director and staff: the RESTORE Council “provides a good model of an appropriate and efficient staffing structure.”⁵²

As for other NRDA cases, in the *Exxon Valdez* oil spill the trustees put in place an executive director and staff, which improved the efficiency and effectiveness of their restoration program (see the box on the following page for additional details).



Photo by Helen Rose Patterson, NWF.

3.2.3(q)); and “[a]dminister[ing] the Council’s environmental compliance program...” (note that this is one of the duties that cannot be delegated “to another staff member unless written approval is received from the Council”) (*id.* at 3.2.3(y)).

⁵¹ *Id.* at 3.2.6.

⁵² Letter from Ocean Conservancy to U.S. Fish and Wildlife Service Re: Ocean Conservancy’s Comments on the *Deepwater Horizon* Oil Spill: Draft Programmatic Damage Assessment and Restoration Plan and Draft Programmatic Environmental Impact Statement at 4 (Dec. 4, 2015), available at: <http://www.gulfspillrestoration.noaa.gov/sites/default/files/wp-content/uploads/correspondence-appendix-with-cover.pdf>. (“We are concerned that, without dedicated staff to serve the Trustee Council, the Council’s ability to provide the level of coordination and oversight envisioned by this restoration plan will be significantly impaired. Ocean Conservancy believes an independent, dedicated staff is the most efficient way to accomplish this effort. Therefore, the Trustee Council should, at a minimum, hire an executive director and a dedicated science coordinator to provide oversight, formalize planning, science and monitoring coordination across restoration areas and across other restoration programs (e.g., RESTORE Act and NFWF), and assist in identifying opportunities for collaboration and leveraging restoration funding.”)

The Exxon Valdez Oil Spill Trustee Council

After the *Exxon Valdez* oil spill contaminated a long stretch of Alaska's coastline in 1989, the State of Alaska, the United States, and Exxon reached a \$900 million civil settlement to restore injured resources. The *Exxon Valdez* Oil Spill Trustee Council (EVOSTC) is charged with administering the settlement monies. It includes representatives from three state agencies and three federal agencies.⁵³ The six members are not responsible for daily operations of the restoration program. Instead, they have an Executive Director and staff, who "manage the day-to-day administrative functions of the Trustee Council and the overall restoration program," including certain coordinating functions.⁵⁴

The EVOSTC adopted its organizational structure after first using a different approach. When it was initially formed, the Council thought it would be "expeditious and prudent" to rely on the "'existing structure' within the trustee agencies to manage the restoration effort."⁵⁵ This "seemed to make good administrative sense, considering the structure already in place through the NRDA [pre-settlement] restoration planning efforts was made up mostly of trustee agency personnel," and it seemed that "this way, restoration funds would be reserved for restoration rather than expended on a federal-state bureaucracy."⁵⁶ Nonetheless, the EVOSTC soon encountered problems inherent in "navigating through the varied requirements of six different resource agencies," and restoration planning did not proceed efficiently.⁵⁷

Two years later, the EVOSTC decided to install an executive director. After a short

⁵³ The agencies are: the Alaska Attorney General; the Alaska Department of Environmental Conservation; the Alaska Department of Fish and Game; the U.S. Department of Agriculture; the U.S. Department of the Interior; and NOAA. See EXXON VALDEZ TRUSTEE COUNCIL GENERAL OPERATING PROCEDURES at 1 (Feb. 2012), available at:

www.evostc.state.ak.us/Universal/Documents/Policies/operating_procedures.pdf.

⁵⁴ *Id.* at 2. The Executive Director oversees the activities of the Trustee Council staff, who are responsible for functions that include "facilitating communication between the federal and state governments[,] the Trustee Council members, the Science Panel, the Public Advisory Committee, and any Trustee Council-funded programs." *Id.*

⁵⁵ Joe Hunt, MISSION WITHOUT A MAP: THE POLITICS AND POLICIES OF RESTORATION FOLLOWING THE EXXON VALDEZ OIL SPILL at 75 (2010), available at:

www.nmfs.noaa.gov/ocs/mafacs/meetings/2010_06/docs/mission_without_map_evos.pdf. (According to author Hunt, "*Mission Without A Map* is a documented history of the Trustee Council, derived mostly from the public record. It was first inspired as a means of digesting an enormous administrative record into a readable format, so that future administrators, scientists, and scholars hoping to learn from the Exxon Valdez restoration experience have a basis to begin their research. ...Not everyone agrees with the observations found here, including trustees and restoration office management." *Id.* at v.)

⁵⁶ *Id.* at 75. ("For a new entity embarking on a massive restoration effort with very little to guide them, it seemed expeditious and prudent to take advantage of the administration, in-house accounting, and natural resource expertise of existing agencies.")

⁵⁷ *Id.* at 75.

transition period, “all decisions” and “all planning” were consolidated to the executive director’s office.⁵⁸ According to a book written on the spill, “[t]he difference [the executive director] brought to the Trustee Council was immediate,”⁵⁹ and the change was “no doubt, for the better.”⁶⁰ The executive directorate is credited with finalizing the restoration plan, “improv[ing] the work plan process [by] providing uniformity, predictability, and accountability,” and working to “improve the likelihood of success in the habitat protection program.”⁶¹ Moreover, by hiring a dedicated staff to replace the various labor costs within the “existing structure,” the executive director reduced the EVOSTC’s administration budget by 20 percent.⁶²

It is important to note that in the current NRDA process, the lead administrative trustee (LAT) carries out some of the responsibilities that a “permanent operations structure” might perform, at least on the administrative side. Funded from the Region-wide TIG allocation, the LAT has a number of responsibilities, including “administrative support for the Trustee Council and TIGs[,] development and maintenance of the Administrative Record, Trustee Council website, and Restoration Portal... and aggregation of TIG data and generation of reports related to restoration projects, compliance, monitoring and finance.”⁶³ Unlike the RESTORE Council and *Exxon Valdez* staff, the LAT does not, however, carry out any substantive duties.

4. Coordinating Body

Some have suggested that a single entity could be created, or an existing one designated, to coordinate restoration activities across the region. For example, in his 2010 post-spill report, Secretary of the Navy Roy Mabus recommended that “a unifying structure be created to facilitate efforts between disparate federal, state, and local stakeholders.” Mabus noted that this would “facilitate the implementation of programs and projects – those needed to repair harm from the spill, as well as those envisioned before the spill.”⁶⁴

⁵⁸ *Id.* at 91. (“The restoration effort, at times, acted like a six-spoke wheel without a hub. [The Executive Director’s] job was to center that hub and to make sure each spoke was attached firmly.” *Id.* at 90.)

⁵⁹ *Id.* at 92.

⁶⁰ *Id.* at 96.

⁶¹ *Id.* at 95.

⁶² *Id.* at 93. *Mission Without a Map* also asserts that the creation of an “independent office” to oversee the restoration effort allowed the trustees to “transcend the perception that the restoration effort was just a self-perpetuating funding machine for trustee agencies.” *Id.* at 96.

⁶³ Region-wide Restoration Area Trustee Implementation Group Resolution # RW-2016-002 (July 1, 2016), available at: <https://www.fws.gov/doiddata/dwh-ar-documents/1191/DWH-ARZ000034.pdf> .

⁶⁴ Secretary of the Navy Roy Mabus, AMERICA’S GULF COAST: A LONG TERM RECOVERY PLAN AFTER THE DEEPWATER HORIZON OIL SPILL at 10 (September 2010), available at: www.restorethegulf.gov/sites/default/files/History_%20MabusReport.pdf.

Based on this recommendation, President Obama by executive order established the Gulf Coast Ecosystem Restoration Task Force,⁶⁵ whose purpose was “to coordinate intergovernmental responsibilities, planning, and exchange of information so as to better implement Gulf Coast ecosystem restoration and to facilitate appropriate accountability and support throughout the restoration process.”⁶⁶ The Task Force included representatives from all five Gulf states and the federal government. The Task Force was in place for approximately two years, but was dissolved after the RESTORE Act was enacted by Congress and the RESTORE Council was established.

In addition to Secretary Mabus, there are other proponents of a single coordinating body. These include certain U.S. senators and representatives from Gulf states, who have proposed legislation to designate such a body (this is discussed in more detail below).⁶⁷ This proposal is supported by state resource agencies in Mississippi, Louisiana, Florida, Texas, and Alabama.⁶⁸ Note that regional coordinating bodies have been used in other large-scale restoration efforts (see box below on the Chesapeake Bay Program).



Photo by ELI Gulf Team.

If a coordinating body were to be designated, this raises the question: what organization or entity could fill this role? One possibility is the RESTORE Council, which was established in 2012 and includes representatives from the five Gulf states and six federal agencies.⁶⁹ Unlike the predecessor Task Force, the Council has no direct mandate to coordinate the various restoration efforts. It has nonetheless signaled that it could play a role in regional coordination.

⁶⁵ See U.S. EPA, “Web Archive: Gulf Coast Ecosystem Restoration Task Force” (“The Gulf Coast Ecosystem Restoration Task Force...is the result of a recommendation made in Secretary Mabus’ report on long term recovery following the Deepwater Horizon Oil Spill”), available at: <https://archive.epa.gov/gulfcoasttaskforce/web/html/> (last accessed Oct. 24, 2017).

⁶⁶ Executive Order 13554, § 1 (Oct. 5, 2010), available at: <https://obamawhitehouse.archives.gov/the-press-office/2010/10/05/executive-order-13554-gulf-coast-ecosystem-restoration-task-force>.

⁶⁷ See Office of Senator Robert Wicker, “Press Release: Wicker, Cochran and Cassidy Seek to Strengthen Gulf of Mexico Alliance” (June 19, 2017), available at: www.wicker.senate.gov/public/index.cfm/2017/6/wicker-cochran-cassidy-seek-to-strengthen-gulf-of-mexico-alliance#.WbF7UT2wMr4.cleansave.

⁶⁸ The support relates to the Senate proposal. See *id.*

⁶⁹ RESTORE Act, § 1603(t)(2)(C)(ii).

In its Comprehensive Plan Update 2016, the Council “recognize[d] that it has an important opportunity to help facilitate dialogue among the Gulf restoration partners by,” among other things, “serving as the connector between funding sources.”⁷⁰ The Council indicated that it intends to “[s]ponsor and participate in meetings and workshops to foster coordination and collaboration among [Council] members and [their] restoration partners (e.g., NRDA and NFWF).”⁷¹ (Its workshops are discussed in more detail above.) While the Council may be willing to play this role in regional coordination, it is unclear whether its efforts will be sufficient to coordinate the various Gulf restoration efforts.

Another existing entity that could serve as a coordinating body is the Gulf of Mexico Alliance (GOMA). Established in 2004, GOMA is a non-profit organization composed of government representatives from each of the five Gulf States and a “broad partner network that includes federal agencies, academic organizations, businesses, and other non-profits in the region.”⁷² GOMA’s stated goal is “to significantly increase regional collaboration to enhance the environmental and economic health of the Gulf of Mexico.”⁷³

There are currently two bills before Congress (one in the House of Representatives and one in the Senate) that seek to designate GOMA as a “regional coordination partnership” to coordinate the management of the Gulf ecosystem, including restoration.⁷⁴ The two proposals are structured slightly differently,⁷⁵ but both would provide GOMA with federal funding to carry out various duties, including “coordinating ... restoration programs to minimize duplication and maximize leveraging opportunities” and “promoting coordination” of federal, state, and local authorities’ actions.⁷⁶ It is unclear, however, whether either of the two current bills will move forward to a vote.⁷⁷

⁷⁰ COMPREHENSIVE PLAN UPDATE at 24.

⁷¹ COMPREHENSIVE PLAN UPDATE at 17.

⁷² Gulf of Mexico Alliance, “About Us,” <http://www.gulfofmexicoalliance.org/about-us/organization/> (last accessed Mar. 1, 2018).

⁷³ *Id.*

⁷⁴ H.R. 2923, 115th Congress (introduced June 15, 2017); S. 1373, 115th Congress (introduced June 15, 2017).

⁷⁵ The House bill would “recognize and enable GOMA as a lead coordinator of Federal and State authorities with other voluntary efforts for the collaborative management of the Gulf of Mexico” and would “enable [GOMA] to receive Federal funding through an appropriation.” H.R. 2923, Sec. 3. The Senate bill would designate GOMA as a “Regional Coordination Partnership of the National Oceanic and Atmospheric Association” that would receive appropriations as part of that agency’s budget. See S. 1373.

⁷⁶ S. 1373, Sec. 320. The House bill contains similar provisions. See H.R. 2923, Sec. 3.

⁷⁷ The two current bills are to be considered by the 115th Congress, which is in session until January 3, 2019.

There are other possibilities for a regional coordinating body. For instance, a new entity could be created to coordinate the existing efforts. This would in all likelihood require federal legislation; it is, however, unclear whether there is any political backing for such an idea and, if so, whether it would get any traction in Congress.

Aside from feasibility issues, one commentator has noted that “a peak or central coordinating body may be controversial among those who believe the complex task of ecosystem governance is best addressed through decentralized, non-hierarchical, networked structures.”⁷⁸ As the same author explains, however, a coordinating body need not have the role of “an authoritative commander in a top-down decision-making process, but rather that of a central information hub, absorbing, integrating, and redistributing information from all the specialized components of the larger arrangement.”⁷⁹

Another commentator has suggested that if a single, coordinating entity is not feasible, then “perhaps a Gulf coordinating forum could be established where representatives of these different groups could exchange information and harmonize their plans.”⁸⁰

Regional Coordination in the Chesapeake Bay Watershed

Similar to the Gulf, the Chesapeake Bay is a regional water body where various state and local governments, federal agencies, and other organizations are involved in restoration efforts. Since 1983, there has been a regional partnership, the Chesapeake Bay Program (CBP or Program), in place to help coordinate these efforts. In 2014, the Program’s current framework agreement, the Chesapeake Bay Watershed Agreement (CBWA), was signed by the governors of six states, the mayor of the District of Columbia, the chair of the tristate Chesapeake Bay Commission, and the administrator of the Environmental Protection Agency on behalf of the federal government. Now in its fourth decade, the CBP is an “extensive, mature, institutionally complex, and successful” organization and is “viewed as a model for other large estuaries and highly stressed marine ecosystems.”⁸¹

⁷⁸ Bradley C. Karkkainen, *Managing Transboundary Aquatic Ecosystems: Lessons from the Great Lakes*, 19 PAC. MCGEORGE GLOBAL BUS. & DEV. L.J. 209, 232 (2006).

⁷⁹ *Id.*

⁸⁰ Daniel Farber, *The BP Blowout and the Social and Environmental Erosion of the Louisiana Coast*, 13 MINN. J.L. SCI. & TECH. 37 (Winter 2012). (“The problems facing the Gulf could not be solved overnight even by an omnipotent regulatory program with an unlimited budget. It is inappropriate to use such an idealized regulatory [sic] as our benchmark for assessing progress. Rather, we need to concentrate on moving the status quo in the right direction, and in particular on creating a more viable forum for state and federal officials to coordinate their actions and develop joint programs.”)

⁸¹ Bradley Karkkainen, *Marine Ecosystem Management and a “Postsovereign” Transboundary Governance*, 6 SAN DIEGO INT’L L.J. 113, 126 (Fall 2004).

Some features of the CBP that help facilitate regional coordination are:

- **A signed framework agreement that sets out coordinated goals and region-wide restoration targets:** The CBWA commits signatories to the collective advancement of 10 higher-level “goals” and 31 related “outcomes” (i.e., “specific, time-bound, measurable targets”).⁸² The goals and outcomes provide the overall direction for coordinated restoration and protection of the watershed; the signatures of top officials (e.g., governors) help ensure the partners’ accountability, to the public and to each other, in working toward their CBWA commitments.⁸³
- **Joint decision-making at each level of the governance structure:** Joint decision-making is a key tenet of the CBP, and in general, consensus is required for decisions taken at any level of the governance hierarchy (see graphic below on CBP governance structure).⁸⁴ By allowing all signatories an opportunity to weigh in on decisions, the CBP fosters equity among, and buy-in from, the participating jurisdictions.⁸⁵
- **Permanent staff to help coordinate the Program’s sub-bodies:** The Chesapeake Bay Program Office (CBPO) staff, headquartered in Annapolis, Maryland, carry out the Program’s day-to-day operations and help coordinate among its numerous sub-bodies.⁸⁶ Some CBPO staff members also serve on the “Enhance Partnering, Leadership, & Management” Goal Implementation Team (GIT) (see graphic below for how GITs fit into the CBP governance structure), which was created to support “coordination and management of the overall Bay Program.”⁸⁷
- **Adaptive management system that fosters ongoing coordination:** The Program’s Biennial Strategy Review System (SRS) is a formalized adaptive management process that allows the GITs to review – and, as necessary, amend – their strategies and work plans.⁸⁸ Within the GITs, there

⁸² Chesapeake Bay Watershed Agreement at 3 (2014), available at:

https://www.chesapeakebay.net/what/what_guides_us/watershed_agreement.

⁸³ Personal communication with Doreen Vetter & Carin Bisland, CBP Office (CBPO) (Jan. 2018).

⁸⁴ Chesapeake Bay Program, GOVERNANCE AND MANAGEMENT FRAMEWORK FOR THE CHESAPEAKE BAY PROGRAM PARTNERSHIP (Jul. 14, 2015), available at:

https://www.chesapeakebay.net/channel_files/22179/cbp_governance_document_7-16-14.pdf.

⁸⁵ Personal communication with Carin Bisland & Doreen Vetter, CBPO (Jan. 2018).

⁸⁶ *Id.*; see also Chesapeake Bay Program, GOVERNANCE AND MANAGEMENT FRAMEWORK FOR THE CHESAPEAKE BAY PROGRAM PARTNERSHIP, *supra* note 84.

⁸⁷ *Id.* at 11; Personal communication with Carin Bisland & Doreen Vetter, CBPO (Jan. 2018). CBPO operations are funded through federal appropriations pursuant to the Program’s authorizing statute (see 33 U.S.C. § 1267), while implementation funding for restoration projects and programs generally comes from local, state, and other federal sources. *Id.*

smaller “work groups” focused on specific outcomes; the SRS ensures that every work group comes before the Management Board (MB) at least once during the two-year review period to provide updates, consider new developments, and receive feedback.⁸⁹ Typically, these sessions are scheduled so that work groups with related outcomes can attend the same quarterly meeting, which fosters ongoing coordination and collaboration among them. Due to its place in the middle of the governance hierarchy, the MB also plays a key role in connecting the work groups’ activities on the ground with the higher-level strategy decisions made at the top.⁹⁰

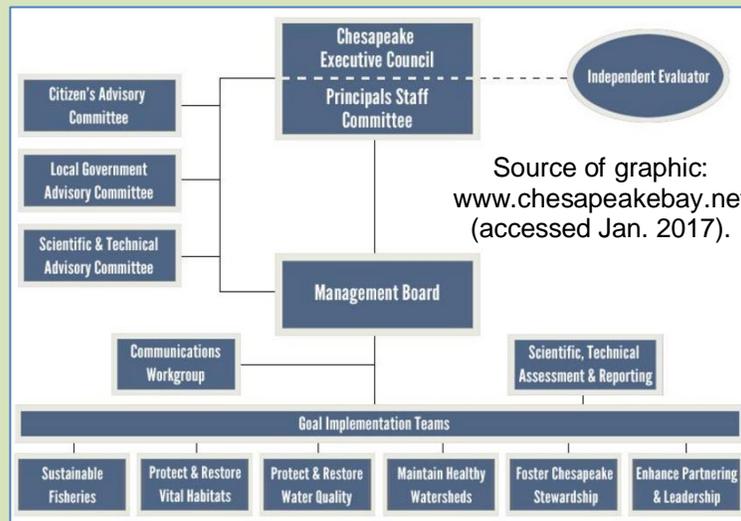


Figure 4: Chesapeake Bay Program Governance Structure.

Conclusion

There are a number of tools and mechanisms that are available to the trustees to help them coordinate both internally and with external entities. This paper highlighted some of these, and provided examples of how they are being used in this and other large-scale restorations. As Gulf restoration moves forward, these tools and mechanisms, along with others, will likely play an important role in “promot[ing] successful implementation of [the PDARP] and optimiz[ing] ecosystem recovery within the Gulf.”⁹¹

⁸⁸ See CHESAPEAKE BAY PROGRAM BIENNIAL STRATEGY REVIEW SYSTEM (Apr. 17, 2017), available at: https://www.chesapeakebay.net/channel_files/24709/cbp_biennial_strategy_review_system_general_description_april_17_2017.pdf.

⁸⁹ Personal communication with Carin Bisland & Doreen Vetter, CBPO (Jan. 2018); see also CHESAPEAKE BAY PROGRAM BIENNIAL STRATEGY REVIEW SYSTEM, *supra* note 88, at 2.

⁹⁰ Personal communication with Carin Bisland & Doreen Vetter, CBPO (Jan. 2018).

⁹¹ PDARP at 7-16 to 7-17 (addressing coordination “with other restoration programs, including other *Deepwater Horizon* restoration programs,” the trustees stated: “[c]oordination among programs will promote successful implementation of [the PDARP] and optimize ecosystem recovery within the Gulf”).



ENVIRONMENTAL
LAW • INSTITUTE®

1730 M Street, NW, Suite 700

Washington, DC 20036

Tel: 202.939.3800

Fax: 202.939.3868

www.eli.org