

AQUATIC NUISANCE SPECIES TASK FORCE: MINUTES OF THE 2012 SPRING MEETING MAY 2–3, 2012

On May 2–3, 2012, the Aquatic Nuisance Species Task Force (ANSTF) met at the O’Callaghan Annapolis Hotel in Annapolis, MD. Decisions and action items are listed below, followed by a summary of the two-day meeting.

Decisions

The ANSTF made the following decisions:

- Approved meeting agenda for the spring 2012 meeting
- Approved minutes for the fall 2011 ANSTF meeting
- Approved the 2013 to 2017 Strategic Plan
- Agreed to establish an ad-hoc committee to develop an ANSTF operational plan
- Agreed to re-establish an ad-hoc committee to update the *New Zealand Mudsail Management and Control Plan*

New Action Items

The ANSTF assigned the following action items:

- (Executive Secretary) Disseminate GAO audit letter to ANSTF members
- (Executive Secretary) Explore opportunities for ANSTF and panels to assist with planning NISAW activities
- (ANSTF co-chairs, NISC, and Doug Austen) Meet to discuss opportunities to work with LCCs, ANSTF, and NISC. Provide an update at the fall ANSTF meeting.
- (Bill Bolen) Email fish carcass BMP to Laura Norcutt
- (Bill Bolen) Email Asian Carp Regional Coordinating Committee agenda to Susan Mangin to distribute to ANSTF
- (ANSTF and Panels) Contact Bill Bolen for ICS and Rapid Response training needs
- (Laura Norcutt) Resend draft *Recreational Guidelines* to ANSTF and panels for review
- (ANSTF) Email updates to Susan Mangin for inclusion in the meeting minutes and posting on the website

1. Welcome and Preliminary Business

Peg Brady, National Oceanic and Atmospheric Administration (NOAA) Liaison to the National Invasive Species Council (NISC) and ANSTF, welcomed participants to the meeting hosted by the Mid-Atlantic Regional Panel (MARP). Brady was attending on behalf of NOAA Co-Chair Eric Schwaab, Acting Assistant Secretary for Conservation and Management, who could not attend. Brady reminded participants that the ANSTF *Strategic Plan* and the *Recreational Guidelines* were being presented for consideration and thanked Executive Secretary Susan Mangin, U.S. Fish and Wildlife Service (FWS), and her staff for organizing the meeting. Mike Weimer, Acting Chief for the Division of Fisheries and Aquatic Resource Conservation, FWS, extended apologies for Co-Chair Bryan Arroyo, Assistant Director for Fisheries and Habitat Conservation, who could not attend. Weimer thanked MARP for hosting the meeting.

Self Introductions

ANSTF members and audience members introduced themselves.

2. Adoption of Agenda/Approval of Minutes/Review of Previous Action Items

Following introductions, the ANSTF approved the agenda for this meeting and the meeting summary for the fall 2011 meeting in Washington, DC.

Mangin reviewed action items from the spring meeting:

- *Email draft Strategic Plan and timeline to the ANSTF and Panels for review*—Susan Pasko, NOAA, and team have drafted the updated 2013–2017 *Strategic Plan*. Tab 2 in the Briefing Books contains the draft plan. This issue will be discussed during session 10.
- *Implement award pilot during National Invasive Species Awareness Week (NISAW)*—The pilot program was implemented during NISAW. The awards were presented at the Department of Agriculture in Washington, D.C. Mike Ielmini, U.S. Forest Service (USFS), scheduled the venue. During the awards ceremony, Lori Williams, NISC, explained the awards and Brady presented them. Tab 3 in the Briefing Books includes the list of recipients. Despite the short notice, the Award Ad-hoc Committee received 20 nominations for the 3 award categories. The program will continue although the Ad-hoc Committee will be abolished because it completed its task of developing a pilot awards program.
- *Distribute draft Recreational Guidelines to the ANSTF and Panels for review*—Laura Norcutt, FWS, led this effort and will present the draft guidelines during session 11. Tab 4 of the Briefing Books contains the draft *Recreational Guidelines*.
- *Provide input to Mangin on their use and experience with the Non-indigenous Aquatic Species Database*—The ANSTF has drafted a letter to the U.S. Geological Survey (USGS) highlighting the importance of the database. Mangin read sections of the letter out loud. The letter is undergoing review and will be sent to the USGS soon.
- *Distribute the National Research Council report to the ANSTF*—John Darling, Environmental Protection Agency (EPA), distributed the National Research Council report as well as *Density Matters*, written by Henry Lee.
- *Establish an ad hoc committee to address research gaps in the National Research Council report*—In January, Darling convened the first ad hoc committee meeting. The committee has 20 members and has held 3 conference calls. The EPA and U.S. Coast Guard (USCG) have jointly tasked the National Research Council with providing advice on how to set discharge standards for ballast water. These reports stated too many research gaps exist and the ad hoc committee has been tasked with filling those gaps. The committee has concluded they need to convene a group of

experts for a focused discussion, perhaps at a workshop late this summer. Mangin reminded participants that the ANSTF organizational chart on Tab 5 in the Briefing Book lists the ad hoc committee members.

- *Develop a national snakehead management and control plan*—Norcutt reported the committee will have a draft plan for approval at the fall 2012 ANSTF meeting.
- *Post outreach items on the ANSTF website*—The ANSTF posted the NISAW information on its website. Additional information to be posted on the website should be submitted to Mangin.
- *Provide Mangin with information relative to fiscal management services for the Panels*—The ANSTF is working on a streamlined process to distribute funding.
- *Draft a letter to NISC recommending that NISC work within its membership to address the movements of infested boats and the responsibilities of federal agencies to prevent the spread, with the goal of decreasing the number of infested boats moving around the nation with emphasis on the western United States*—Mangin reported the letter has been written and reviewed by the Western Regional Panel (WRP) and is in the agency review process.
- *Develop a national invasive lionfish prevention and control plan*—James Ballard, Gulf States Marine Fisheries Commission (GSMFC), reported that the committee has been expanded to 22 members. The committee has written the body of the plan and has broken into separate groups to work on the three goals in the plan. The writing groups meet via conference call every 2 weeks. Ballard will pull together a draft document and send it to the full committee to discuss. The goal is to have a draft plan for review at the fall 2012 ANSTF meeting.
- *Develop a joint ANSTF/NISC climate change ad-hoc committee*—Adrianna Muir, Department of State, reported the committee has several members (see Tab 5 of the Briefing Book), but they are still in the development phase. Stas Burgiel, NISC, has requested information from those working in the field of climate change, and Muir reiterated that request to the Regional Panels. The committee has a growing list of interested members, but they don't really know what tools exist and what tools need to be developed. A call will be held next month.
- *Great Lakes Panel recommended that a progress report relative to injurious wildlife be provided to the ANSTF annually*—This item will be discussed during session 18.

3. Informational: Those Big, Bad Crawdads! Vectors, Effects, and Management of Invasive Crayfishes in Maryland

Jay Kilian, Maryland Department of Natural Resources (MDNR), reported nonnative crayfish species are a leading threat to freshwater crayfish. Nonnative crayfish become established quickly, tend to be large and aggressive, grow rapidly, and produce many offspring. If a nonnative crayfish is introduced, the native species will often quickly disappear. Frequent sampling has provided good information about native species distribution, invasive species introduction, and invasive species distribution. Maryland has 9 native species and 5 nonnative species. These nonnative species were primarily introduced through aquaculture and the live bait industry. Kilian explained how the red swamp crawfish (*Procambarus clarkii*) was introduced through aquaculture, how it became established, and its current range.

Managing aquaculture as a vector and minimizing future introductions should be possible. However, managing live bait as a vector will be much more challenging. A survey of Maryland anglers in 2008 revealed that using and releasing live crayfish as bait by anglers is a significant problem. Kilian described how virile crayfish (*Orconectes virilis*) and rusty crayfish (*Orconectes rusticus*) were introduced via the live bait industry, their current distribution, and their detrimental effects on native ecosystems. The MDNR partnered with local universities and organizations to annually monitor over 35 sites in the Monocacy River watershed for rusty crayfish from 2007 to 2011. This effort revealed

the rusty crayfish disperses downstream at a rate of 1.9 river kilometers per year and it dominates the community within 2 years.

Managing live bait can be accomplished through regulations and education. However, a regional effort that includes good communication, greater oversight and understanding of the live bait industry, consistent regulations, and coordinated education efforts will be needed.

4. Informational: A Crayfish's Tale: Determining *Orconectes virilis* Macrohabitat Preference through Use of Telemetry in a West Virginia Stream

Dr. Zachary Loughman, West Liberty University, described his study to determine the conservation standing and diversity of crayfish species in West Virginia. Dr. Loughman described the distribution of the virile crayfish and the spinycheek crayfish (*Orconectes limosus*), which was deemed extirpated in 2009. Discovery of the virile crayfish in a tributary of Anthony Creek in 2010 provided an opportunity for Dr. Loughman to study the life history and macrohabitat utilization of this invasive. Results from his surveys revealed that invasive crayfish reproduce earlier than the native species and lay 4 times as many eggs. To further his study, Dr. Loughman applied transmitters to 12 native and 8 invasive species. Telemetry data indicate that native species move rarely and for short distances. The virile crayfish act as residents (staying in 1 location for a long time) and adventives (moving frequently for long distances).

Macrohabitat results indicate that virile crayfish prefer depositional habitats, utilize hardpan bands for extensive burrow networks, and do not display a preference for boulder fields. Streams with low anthropogenic impact limit depositional habitat for invasives, which could explain why invasives were not found in pristine waterbodies. Streams with monotypic populations of invasives have high anthropogenic impact. The best management strategy could be to maintain stream health, which would limit the environment needed to create a large invasive population.

5. Informational: Initial Steps toward Nutria Eradication in Virginia

Michael St. Germain, Virginia Tech, described nutria (*Myocastor coypus*). First introduced for the fur trade, nutria is a large, aquatic rodent that is native to South America. Nutria reproduce at 6 months and have 4–6 pups in a litter, resulting in an exponential growth curve. When released, nutria feed on marsh vegetation and can turn marshes into mudparks. Nutria became established in 1956 in Back Bay, Virginia, but populations fluctuated. In response to increasing populations, the Virginia Nutria Team obtained money from MARP to eradicate nutria from Virginia. The first step was developing a website to engage the public and expand their knowledge about nutria distribution. These reports helped the team develop a better distribution map.

The second step was holding a nutria workshop with agencies from North Carolina. The goals of the workshop were to build a current distribution map, discuss the Chesapeake Bay nutria eradication plan, determine how to proceed, and establish mechanisms to proceed. The map developed during the workshop defines three management zones, including an early detection, rapid response zone between North Carolina and Maryland. To date, the team has learned that regulatory agencies must be involved early, the public must be involved substantively, a lot of information is available for them to use and build on, they must remove legal and social obstacles and continue to monitor distributions, and they must develop a detailed strategy that outlines resource needs to implement eradication.

6. Informational: Stopping the Spread of Nutria on Delmarva

Steve Kendrot, U.S. Department of Agriculture Animal Health Inspection Service (USDA APHIS), discussed the history and methods used by the Chesapeake Nutria Eradication Project after studies showed that the invasive mammal played an important role in ecosystem changes to the Blackwater National Wildlife Refuge, including a loss of 5,000 acres of marsh. Although the ultimate goal for these efforts, which began in 2002, was eradication, proving nutria have been eradicated can be very difficult.

Kendrot explained activities conducted for the 5 phases of eradication: survey, knock down, mop up, verification, and surveillance. These phases relied on traditional methods and new technologies: dogs and traps were used for much of the detection and removal, but special suspended traps were developed based on how nutria swim on the surface of the water, especially when they encounter obstacles. Results of traditional detection and removal were also fed into geographic information system (GIS) so that researchers could assess habitat relationships.

These efforts have been largely successful. At one time, 35,000 individuals were estimated in the area. Initially, large numbers were removed, followed by more focused trapping and fewer individuals caught in subsequent years. For all practical purposes, nutria have been eradicated in the Blackwater National Wildlife Refuge (NWR).

Monitoring for reestablishment is still necessary, and research and development are focused on understanding nutria behavior. As part of the Judas Nutria Project, 20 nutria have been surgically sterilized, tagged, and released. Global Positioning System (GPS) data show these nutria travel farther than originally thought. Untagged individuals have also been discovered and trapped.

An external review of the program led to a comprehensive report and some recommendations, which were adopted. A GIS specialist and dog handler may be hired for future monitoring and removal. Kendrot invited participants to visit the website: www.fws.gov/chesapeakenutriaproject/Index.html.

9. Informational: NEMESIS National Database

Whitman Miller, Smithsonian Environmental Research Center (SERC), gave a brief overview of research at the SERC, the Marine Invasion Research Laboratory, and the National Exotic Marine and Estuarine Species Information System (NEMESIS) online database. SERC encompasses 2,700 acres of undeveloped coastal marshland in Chesapeake Bay and comprises 19 environmental laboratories that concentrate on marine and aquatic issues, especially the land-sea interface. It is also part of a marine science network with facilities in Florida, Belize, and the Isthmus of Panama.

The Marine Invasion Research Laboratory, with 40 staff and several students, takes a network approach to understanding the patterns, mechanisms, and management of marine invasive species. The program is located in Edgewater, Maryland, with associated facilities in San Francisco, California; Portland, Oregon; and Panama.

An important project for SERC is the National Ballast Information Clearinghouse, a program mandated by Congress in the National Invasive Species Act of 1996 (P.L. 104-332) and a cooperative effort between the USCG and SERC. SERC collects, analyzes, and interprets data to inform the Coast Guard's regulatory activities. Miller discussed ballast water as it relates to the introduction and establishment of aquatic invasives. He also discussed the role of SERC's Marine Invasions Program in collecting, analyzing, and interpreting data relative to invasion patterns, vectors, invasion processes and management, and invasion impacts.

Data collected through the Marine Invasions Program comprise just one of several inputs to NEMESIS. Outputs of the database can show invasion patterns, predict potential invasion locations, inform policy, help with early detection/rapid response, and measure management efficacy. Miller summarized the content included in NEMESIS (species identity, occurrence, distribution, invasion and population status, vectors, reported impacts, and attributes), giving examples as he talked. He also showed screen captures to illustrate the NEMESIS interface and the kinds of information available to users. NEMESIS is essentially a “node” on the larger NIS database (NIS*base*); Miller explained database integration.

In closing, Miller talked about repeat surveys now being conducted, results of which can be compared with baseline data to track and predict invasions. Research is also looking into the effect of climate change on marine invasion dynamics.

10. Public Comment

No public comments were submitted.

Adjourn

The meeting adjourned at 12:10 PM.

DAY 2

7. Decisional: Government Accountability Office Audit

Stephanie Carman, Bureau of Land Management (BLM), reported on a recent Government Accountability Office (GAO) audit. Federal agencies received notice from the GAO that expressed concern regarding duplication and redundancy in federal invasive species programs. The GAO opened the scoping process in January 2012, where they focused on NISC and ANSTF chair agencies. The GAO also interviewed ANSTF members and Regional Panels, as well as collected documents and discussed how programs were formally coordinated. In April, NISC and NISC co-chairs received a letter from the GAO announcing that they had determined the cost of continuing the investigation was not likely to save the American taxpayer any money.

Carman was involved with many of the phone conferences where most participants expressed that the problem was not duplication, the problem was a lack in funding. Federal agencies clearly illustrated they do a good job of coordinating efforts and being efficient. Brady thanked everyone for answering questions from the GAO and expressed appreciation for everyone's patience and willingness to explain their role.

Mangin will follow up on a request to release the GAO's findings to the media and to distribute GAO's letter to the agencies and Regional Panels so they can distribute it when seeking funding.

8. Informational: National Invasive Species Awareness Week Update

Williams reported on the 2012 NISAW that was held February 26 through March 2. Since no budget is allocated for NISAW, funding came from sponsoring organizations. This year, the meeting had to be approved by the FWS Deputy Secretary.

The first event, Kids Day, was held on Sunday, February 26 at the U.S. Botanic Garden. Approximately 800 people attended this event. On Tuesday, 8 agencies provided updates at the Department of Interior. Approximately 150 people attended this event. The week was filled with various events, including reports from federal agencies on invasive species accomplishments, an international invasive species and green economy forum, a session on prevention, and an invasive species strategic planning stakeholder involvement workshop. There were also several opportunities for participants to speak with members of Congress. New this year was an awards ceremony where awards for outstanding invasive species leadership, outstanding invasive species volunteer, and outstanding achievement in outreach and education were presented.

Challenges next year will be similar to this year, including funding, partnerships, and planning. Hopefully, more local groups and States will hold their own events next year. These events will be announced on the NISAW website. Although organizing this event requires a lot of staff time, it furthers the work of NISC and is one of the few opportunities for people to come to Washington, DC, and network with others involved with invasive species. Williams will send an announcement to the ANSTF when the NISAW steering committee begins scheduling planning meetings.

Finally, Williams announced that NISC is accepting nomination for the Invasive Species Advisory Committee (ISAC). Nominees cannot be federal employees. Their travel will be covered by NISC and they must attend 2 meetings per year.

10. Decisional: ANSTF Strategic Plan and Operational Plan ad-hoc Committee

Pasko reported on the ANSTF Strategic Plan revision for 2013–2017. A team was created at the May 2011 ANSTF meeting, and a draft plan presented at the November 2011 meeting. The comment period ended in February 2012, with over 350 substantial comments received from over 25 agencies and organizations. In March, the revised draft was sent out for agency review, and the final draft was submitted to the ANSTF in April. At this meeting, the committee sought ANSTF approval of the 2013–2017 ANSTF Strategic Plan.

Pasko summarized what types of comments were made, as well as how the committee addressed those comments. Based on specific concerns, changes to the draft Strategic Plan included adding definitions to distinguish Aquatic Nuisance Species (ANS) from aquatic invasive species, an executive summary, a list of acronyms, and footnotes defining other terms. Many states had an issue with reporting requirements, so the committee changed the language to “encourage” rather than “require” reporting. Other revisions included clarifying that the numbering of goals in the plan did not indicate priority or importance. Pasko told participants that a full list of responses to comments was available upon request.

Pasko then introduced the final plan. Eight strategic goals serve as a blueprint and coordination tool for the ANSTF: coordination, prevention, early detection and rapid response, control and management, restoration, education and outreach, research, and funding. Objectives under each goal describe a targeted set of actions to be accomplished over the next 5 years; action items listed under the objectives describe how the ANSTF expects to accomplish the goals and objectives. Once approved, the Strategic Plan will guide development of the ANSTF Operational Plan. This plan depicts short-term efforts used to support and implement the Strategic Plan and allows the goals and objectives of the Strategic Plan to be measurable and accountable. Once developed, the plan will be regularly amended and reported on to measure the progress of the Strategic Plan. To begin the process, agencies and panels will provide planned actions that support the Strategic Plan. Then during the summer, the committee will use agency and panel input to draft the Operational Plan, after which it will be sent to the ANSTF for review and approval, hopefully at the November 2012 meeting.

The ANSTF approved the Strategic Plan and agreed to form an ad-hoc committee to develop the Operational Plan.

11. Decisional: ANSTF Recreational Guidelines

Norcutt reviewed the draft *Recreational Guidelines* written by an ANSTF ad hoc committee. To revise the guidelines, the committee developed a template with the main message of clean, drain, and dry. These guidelines support the Stop Aquatic Hitchhikers! campaign and will be posted on the Stop Aquatic Hitchhikers! website after they have been finalized. Norcutt briefly reviewed the guidelines and thanked Dave Britton, FWS, for developing the diagrams. In addition to several specific recommendations, ANSTF members discussed the following issues:

- These are very general guidelines. If States or federal agencies want to add more detail, they can.
- Some of the recommendations would be impossible to implement, particularly the requirement to rinse boats with 140 degree Fahrenheit water.
- Pathogens are not addressed.
- The guidelines could be restructured to include minimal recommendations and ideal recommendations.
- The guidelines should remind readers to comply with local laws and requirements.

Approval of the guidelines was postponed until the fall 2012 ANSTF meeting. During this time, the committee will incorporate several changes suggested by the ANSTF..

12. Informational: Landscape Conservation Cooperatives

Doug Austen, FWS, introduced participants to a relatively new approach called landscape conservation cooperatives (LLCs), created through Secretarial Order 3289 in September 2009 to help address the impacts of climate change on America's water, land, and other natural and cultural resources. The LLC network's vision is to sustain natural and cultural resources valued by society for current and future generations, while its mission is to function as a network of cooperatives that provide the forums for developing a shared vision of landscapes that sustain natural and cultural resources.

Austen displayed a map of the 22 LLCs, which include all the states and several Canadian provinces and Mexican states. Each LLC is a fundamental unit of planning and adaptive science that informs conservation actions on the ground. Participating in these applied conservation science partnerships are federal and State agencies, tribes, conservation organizations, and universities within the geographically defined areas. Of the 22 LLCs, 18 are primarily led by the FWS, 2 by the Bureau of Reclamation (BOR), 1 by the BLM, and 1 by the U.S. Forest Service. But most have staff from more than one agency.

Though they are based on bird conservation regions, mapping the LLCs has been difficult. Just as organisms don't stop at boundaries, neither should the work being conducted in the LLCs. Austen commented that, to date, work has been aimed at terrestrial rather than aquatic invasives. As an example, he shared information about the Great Northern LLC, the landscape-level issues it is addressing, and its approaches for doing so.

LLCs provide capacity for making strategic science-based decisions within an adaptive resource management framework. This framework ensures a unified conservation approach for defining and pursuing landscape and population sustainability. Science is targeted in the right places through thoughtful planning and monitoring of outcomes. Austen further discussed the role of science in adaptive resource management.

Department of Interior Climate Science Centers (CSCs) and the National Climate Change and Wildlife Science Center (NCCWSC) are the twin centers of this process. In essence, the LCCs are the principal client of the Climate Science Centers, of which there are 8 across the nation, Alaska, and the Pacific Islands.

Austen listed the NCCWSC's mission and science priorities, including assessing current climate change information, understanding climate from natural effects on plants and animals, synthesizing forecasting of adaptation to climate change, quantifying species and habitat vulnerability, developing a clearinghouse and network capacity from data, and developing management tools. Austen then gave examples of climate scientists using models to see how climate affects regions and LLCs evaluating those effects on the ground. The process is cyclical, with data improving the modeling as well as management activities.

Austen also discussed challenges in terms of invasives, which may comprise a limiting factor in attaining landscape conservation goals. Right now, the LLCs would like to help but they first have to know what the needs are and what the ANSTF and others can do to support the dialogue.

In response to a question about research needs, Austen said that the LLC network will request themes and then proposals to identify needs very soon. This process is annual, and each agency has representatives on the LLCs. Other discussion focused on the coasts, marine habitats, economic zones (EZs), ballast water, and funding sources. Austen emphasized the importance of conveying the ANS message to the appropriate LCC steering committee. Brady suggested a dialogue between specific members of the ANSTF, NISC, and Austen and his team to discuss potential interactions.

13. Informational: Mock Incident Management System-based Rapid Response Exercises

Bill Bolen, EPA, first invited participants to attend the Asian Carp Regional Coordinating Committee meeting, kicked off by Taste of Asian Carp, to be held in Chicago, July 11 and 12, concurrent with the event, Taste of Chicago. He then talked about using an incident command system (ICS) to increase agency capability to respond to aquatic invasives.

Lessons learned about rapid response include the variability of agency capabilities and capacities for ANS rapid response, as well as the needs for agencies to combine resources and use ICS, collaborate, and communicate and coordinate with stakeholders and other agencies. To address these needs, ICS 101 was developed. The course is a combination workshop/tabletop exercise that provides fundamental knowledge for personnel with limited experience in the national incident management system (NIMS) and ICS. It also allows for interagency discussion and promotes collaboration. The course can be designed for 1 to 1.5 days and includes a number of modules. Bolen gave an overview of underlying concepts and principles of NIMS and fundamentals of ICS and the unified command. He also described organizational positions within ICS and their functions, parlaying that into a sample ANS ICS organization.

Bolen then reviewed the planning process, with a capital P! The key is to develop the Incident Action Plan (IAP) with operational period objectives, an organizational chart, assignment lists and instructions, a communications plan, a medical plan, a meeting schedule, maps, contact lists, an activity log, and other tools. The organizational chart is especially important given that people from one agency may report to someone from another agency during a rapid response situation. Again, Bolen provided an example related to ANS. Outcomes of the course include skills and abilities to assist with and benefit response activities, skills in other work areas, and skills to volunteer for other areas of response or to assist with other entities in response work.

Discussion focused on the wisdom of taking these kinds of trainings and learning to work across jurisdictional boundaries before an incident arises. The ANSTF posts training updates on the website for those who are interested. They can also contact Bolen directly.

14. Informational: iMAP Invasives Tool

Meg Wilkinson, New York Natural Heritage Program, talked about the iMapInvasives Project (iMap), a means for geotracking invasive species. To date, 7 states are participating: New York, Oregon, Arizona, Florida, Virginia, Vermont, and Pennsylvania. iMap was initially developed in New York as a way to collect and provide data about invasive species for everyone, from citizen scientists to resource managers. Although one of the goals is to facilitate the exchange of data, to fully accomplish that goal, funding will be necessary. To participate in iMap, a state must have a lead partner organization. That group “makes the connections” for aggregating data, networking with partners, conducting training, gathering user feedback, and doing other related tasks. A map illustrated the lead partner organizations for the participating states.

Wilkinson elaborated on how the New York system started. In 2003, Governor George Pataki convened an invasive species task force, and in 2005, the task force delivered 12 recommendations, one of which was the need for an aggregated invasive species database. The task force approached the Natural Heritage Program about taking on that database. Wilkinson also explained another recommendation, the Partnerships for Regional Invasive Species Management (PRISM) network into which New York is divided. The PRISMs help get the word out.

The programs in New York and Oregon have been online the longest, with over 61,000 observation records in New York and 102,000 in Oregon. Strategic data allow for strategic action. iMap has promoted networking between states, where an incredible amount of resources are being shared, including a YouTube channel.

Wilkinson added that the New York Natural Heritage Program met with the Florida Natural Heritage Program because mapping efforts for invasives are already underway there. She also talked about the power of variability and the leverage of pooled resources. The setup fee for a state module is \$200,000 and the annual fee is \$5,000. So setting up core functionality is a good use of money.

As far as functionality, the database must be user friendly and robust. Because of different user levels, it must be “needs appropriate.” Wilkinson gave examples of different levels of users and how iMap was being used by 4-H, school classes, and extension agencies. May 8 marks the kickoff of the iMapInvasivesMobile, an application enabling simple survey recording for the citizen scientist. She also spoke about how natural resource managers could use iMapMobilePro as an advanced field data collection tool, and state administrators can define variables that are useful for their states. Wilkinson illustrated some of the technical aspects of iMap.

Future plans include obtaining funding for a nightly virtual exchange, lake surveys for absence data, and watercraft inspections. Wilkinson will be reaching out to Regional Panels to learn how to make the boat inspections most useful. Followup questions and answers focused on functionality of the tool.

15. Informational: ANSTF Member Updates

Because of time constraints, ANSTF members did not present their updates during the meeting. Instead, they will submit their updates to Mangin who will post them on the ANSTF website.

16. Discussion: Fiscal Year 13 Budget Outlook

Brady asked the federal ANSTF partners to present the budget issues they were anticipating after seeing the President’s Fiscal Year 2013 (FY13) budget.

Bureau of Land Management—Carman reported the Division of Fish, Wildlife, and Plant Conservation hasn’t seen significant budget reductions in the past few years. However, the proposed FY13 budget does include potential impacts. The BLM has been providing States with money to support the state ANS management plans; this funding has been removed for FY13. The BLM is looking for funding to implement decontamination in Lake Havasu.

U.S. Coast Guard—Scott Newsham, reported the USCG has never included a line item in their budget for invasive species, and the USCG is committed to continuing their efforts. Past efforts have been funded at \$3–4 million per year, and Newsham expected that level of funding to continue for FY13. However, the focus will be on type approval of ballast water treatment systems.

Association of Fish and Wildlife Agencies (AFWA)—Kim Bogenschutz reminded participants that AFWA is not a federal agency and is able to lobby and provide budget recommendations. AFWA recommended that \$1.75 million be restored to the FWS ANS budget and an additional \$1.5 million be provided for State ANS programs. AFWA also supported Asian carp implementation and recommended additional money for implementing the National Asian Carp Management Program. Finally, AFWA stated support for the \$300 million recommended by the President for the EPA and Great Lakes Restoration Initiative (GLRI). The AFWA Invasive Species Committee asked State members to contact their Congressional representatives and reiterate the importance of restoring State funding.

Army Corps of Engineers (ACOE)—Linda Nelson reported that ACOE projects have seen a 4% funding decrease related to invasive species, particularly in control and management and research and development. In FY13, the research budget for plant control is zero and the aquatic growth program is slated for removal from the budget. Removing this funding will affect water hyacinth (*Eichornia* spp.) and water lettuce (*Pistia stratiotes*) control in the Gulf States. Funding for controlling water hyacinth in Louisiana will be greatly decreased from \$2 million to \$500,000.

U.S. Forest Service—Ielmini reported a 1% increase in funding due to a budget restructure, which focuses on landscape restoration driven by watershed condition. The USFS invasives program has seen funding increases since 2003; it was originally a \$10 million program and is now funded at \$55 million with 30% being directed towards ANS.

U.S. Fish and Wildlife Service—Weimer reported that the GLRI has been the one bright spot in ANS funding. Craig Martin, FWS, reported that budgets for this decade have remained around \$5 million. FY10 saw a \$2 million increase directed toward quagga (*Dreissena rostriformis*) and zebra mussel (*Dreissena polymorpha*) issues. In FY12, \$2 million was earmarked for decontamination stations, but the budget was not increased to compensate for this requirement. Unfortunately, State ANS management plan funding was reduced to meet this \$2 million requirement. That \$2 million and State ANS management plan funding have been removed for FY13. AFWA's effort to restore this funding is very important. Funding increases include \$900,000 for an Asian carp control strategy framework and \$2 million for developing an early detection program outside of the Great Lakes. The FWS is working with Mississippi Interstate Cooperative Resource Association (MICRA) Chiefs to see how that funding can be used for broader implementation of the national Asian carp control plan. Martin reported on several specific cuts and reminded participants that their briefing books contain 3 fact sheets that discuss funding history and FWS accomplishments.

National Oceanic and Atmospheric Administration—Brady reported that the majority of NOAA's ANS funding came from the Sea Grant Program that was eliminated in FY11. The Sea Grant Program launched a multiyear research program with Sea Grant institutions that are working on specific research needs articulated by the Regional Panels. These projects are ongoing; however, funding will not continue. The National Ocean Service has also been conducting research on lionfish (*Pterois volitans*) and Asian tiger shrimp (*Penaeus monodon*) in the Gulf of Mexico. Again, the FY13 budget contains no money targeted for this work. NOAA Fisheries does not have funds targeted specifically for ANS although the House Appropriations Committee has written a bill that specifically mentions invasive species.

Environmental Protection Agency—Darling reported that GLRI funding is being decreased but not as much as other programs. The FY13 budget proposes \$11 million: a little over \$1 million will stay in the EPA for research and \$8.9 million will go to the competitive grants program. Bolen reported that he is optimistic the GLRI will be extended beyond the initial 5 years. Funding for ANS management plans for those states in the Great Lakes Basin will continue. Although the GLRI will provide less funding for Asian carp response, the GLRI will have \$26 million for Asian carp issues and an equivalent amount from other areas to equal total funding of \$52 million.

U.S. Geological Survey—Cindy Kolar reported a decrease for fixed costs and a \$12.5 million increase for Asian carp work in the Great Lakes in FY12. The FY13 budget includes an additional \$12 million to support Asian carp efforts in the Great Lakes. Another \$1 million is proposed for Asian carp research in the upper Mississippi River, \$1 million for efforts in the Everglades, and \$500,000 for brown tree snake efforts. The Nonindigenous Aquatic Species (NAS) database historically received the majority of funding from the invasive species program. Although funding for the database was cut in FY12, the database should be kept running in FY13.

Mississippi Interstate Cooperative Resource Association—Ron Lukens reported on language drafted by MICRA for a new bill to support the national Asian carp plan.

National Park Service (NPS)—Jennifer Lee reported that the NPS does not have a line item for invasives and has not seen significant funding increases or decreases.

Bureau of Reclamation—Joe DiVittorio reported BOR proposed FY13 funding has been reduced by slightly more than \$1 million. Terrestrial, riparian, aquatic, and zebra and quagga mussel programs will all be affected. However, from 2009 to 2011, the BOR received \$4.5 million in recovery funds that was used to build laboratories and sample up to 400 reservoirs in the western United States. This funding was not included in the FY13 budget, which equates to a \$5.5 million reduction. The BOR is going to have to dig deep to find the funding to continue working with State partners and to keep the early detection sampling program running.

State Department—Muir reported that the State Department does not have a budget line item for invasive species; however, she did not anticipate diplomacy funding changing.

Western Regional Panel—Larry Dalton reported the WRP is trying to hire a new coordinator; however, reduced funding will make finding and retaining a quality candidate difficult. Some WRP member states have good ANS programs that are supported by State ANS management plan money; other member states have no program at all. If federal funding is cut, the State legislatures will interpret that reduction as a reduction in interest, and the States will budget less money, too.

Gulf States Marine Fisheries Commission (GSMFC)—Ballard reported the southern division is voting on a resolution asking for more ANS funding that will be sent to their delegates if passed. That same resolution called for restoring funding to the NAS database.

Pennsylvania Invasive Species Council—Leo Donovall reported on lobbying for a block grant for invasive species work. This funding would come from the Farm Bill and would be coordinated by the States. They are also lobbying for \$50 million for State agricultural departments to control transportation as a pathway.

17. Informational: Impact of Fish Passage on the Movement of AIS

Two teams of presenters spoke about concerns of ANS movement resulting from fish passage improvements made to different watersheds. First, Andrew Struck, Planning and Parks Department in Ozaukee County, Wisconsin, discussed the multimillion-dollar project (with primary funding from NOAA and EPA) to restore fish passage in the Milwaukee River Watershed. The theme of the project was “making connections.” Lake Michigan, the Milwaukee River, and its tributary streams will be reconnected for spawning and rearing habitat for target species. This effort also created connections between stakeholder groups, often nontraditional players.

Primary goals were to remove fish passage impediments, thus increasing connectivity to existing high-quality habitat, and to support career development and create jobs. The Mequon-Thiensville “nature-like” fishway was completed, the Lime Kiln Dam removed, and a design created for the Bridge Street fishway. These projects and the removal of over 150 small- and large-scale impediments on 18 tributaries reconnected 75 river and tributary miles. Several species stand to benefit from restored aquatic connectivity, including striped shiner (*Luxilus chrysocephalus*), greater redhorse (*Moxostoma valenciennesi*), longear sunfish (*Lepomis megalotis*), and ellipse mussel (*Venustaconcha ellipsiformis*), although the program specifically focused on northern pike (*Esox lucius*), walleye (*Sander vitreus*), and lake sturgeon (*Acipenser fulvescens*).

After improvements downstream on the Milwaukee River (Mequon-Thiensville Dam fishway and the Lime Kiln Dam removal), the next greatest impediment is the Bridge Street Dam. Struck shared information about the history and characteristics of the Bridge Street Dam, including that it is no longer serving its intended purpose but remains primarily for recreation and aesthetics. Because it is perceived by the Wisconsin Department of Natural Resources (WDNR) as a complete barrier to fish passage, a passive fishway design was created. In certain situations, passing fish can potentially carry ANS, such as sea lamprey (*Petromyzon marinus*), round goby (*Neogobius melanostomus*), and viral hemorrhagic septicemia virus (VHSV). Struck discussed each species, design features developed to address their possible upstream movement, and the program response if detected. For the round goby, they concluded it was unlikely to move upstream given the gradient and it would be controlled by predator species as their populations increased. A tiered monitoring approach and plan would be implemented. The FWS provided criteria to be incorporated into the fishway design for sea lamprey, and VHSV was much more likely to be introduced to watersheds by humans than by fish migrating upstream.

Despite design modifications and the monitoring plan, the WDNR issued a permit for an “active” fishway requiring construction of a trap and sort facility, passage of lake sturgeon only, and fishway closure if impoundment water levels rose to a certain level. The dam owner (Village of Grafton) rejected the permit in 2011. Struck wrapped up his presentation with three take-home messages: 1) develop, publish, and adopt objective, science-based criteria for defining Great Lakes “boundary dams”; 2) recognize demonstrated value of passive fishway designs for sustainable aquatic connectivity; and 3) identify and involve regulatory “decision-makers” early in the process. He also acknowledged program staff.

Rory Saunders, NOAA, and Richard Dill, Maine Department of Marine Resources, then talked about the Penobscot River Restoration Project (PRRP) and northern pike efforts. Saunders talked about large-scale dam removals undertaken as part of the PRRP and the many partners of the Penobscot River Restoration Trust that made this huge undertaking possible.

The Penobscot River of Maine is important for 12 native diadromous species; shortnose sturgeon (*Acipenser brevirostrum*) and Atlantic salmon (*Salmo salar*) (designated as endangered); Atlantic sturgeon (*Acipenser oxyrinchus oxyrinchus*) (threatened); alewives (*Alosa pseudoharengus*), blueback herring (*Alosa aestivalis*), and rainbow smelt (*Osmerus mordax*) (NOAA species of concern); American shad (*Alosa sapidissima*), tomcod (*Microgadus tomcod*), sea lamprey, American eel (*Anguilla rostrata*), and brook trout (*Salvelinus fontinalis*) (status unknown); and striped bass (*Morone saxatilis*) (possibly recovered). When The Nature Conservancy was considering its involvement on the PRRP, an overlay of the human footprint of the entire ecosystem showed sparse settlement and low road density, indicating a high potential for success.

Project objectives are not only to benefit the listed species and their habitat, but also to enhance recreational and cultural values and maintain hydropower generation. Three dams have now been purchased, with plans to remove Veazie and Great Works, bypass Howland, and install state-of-the-art fish passage at Milford. Energy production will be maintained through intra- and interbasin energy enhancements and head pond increases. Total investment for PRRP activities will be \$50–\$60 million.

Dill followed up with information about the illegal introduction of northern pike in the Penobscot drainage in the late 1990s. Pike were confirmed in Pushaw Lake in 2004. This 5,000-acre warm lake is located midway within the drainage and flows about 11 miles to the mainstem Penobscot. It’s also highly developed with nearly a thousand seasonal residents and recreationally based.

Northern pike grow rapidly, live for a long time, and are highly fecund. As a top-level predator, they are highly adaptive to various habitats. In 2005, a multiagency work group was assembled to determine the species status in Pushaw Lake; understand the ramifications to the watershed; assess the potential for eradication, containment, or suppression; and develop a management plan with recommendations. Eradication was deemed impossible. There has also been a push for outreach, given that illegal introduction was not a concern in the early years of the PRRP.

One of the issues of the work group was to assess the risks versus benefits of restoring watershed connectivity on the Piscataquis River, a tributary to the Penobscot. Specifically, would removing 2 lower mainstem dams and a nature-like bypass around the dam in the town of Howland on the Piscataquis allow nonnative or invasive species to disperse throughout the drainage? The 2009 risk assessment looked at important fishery resources that could be at risk and inventoried natural and manmade barriers to fish passage in the Piscataquis drainage. Findings showed that accessibility was poor, occurrence of species of concern was low, and much of the best habitat for listed species is not appropriate for northern pike. The assessment also found that northern pike are more likely to be introduced by humans than disperse upstream naturally. Based on these results and the projected annual returns of listed species to the Piscataquis River, the agencies determined that the benefits of fish passage and restoring diadromous fish to the Piscataquis outweigh the risk of natural dispersal of northern pike. Unfortunately, this decision was not popular with some local stakeholders, who have successfully blocked fish passage at three large lakes in the drainage that were historically important to diadromous fish.

18. Informational: Updating the Evaluation Process for Invasive Species

To address a recommendation of the Great Lakes Regional Panel, Martin updated the ANSTF on efforts to strengthen the federal screening for injurious wildlife for organisms in trade and listing process for plants and animals. Fortunately, America is becoming more aware of this issue.

Martin summarized the invasion process—introduction, survival, establishment, spread, and harm—as well as associated management options, expected outcomes, cost-to-benefit trend, and authorities. Once a species has been established, spread, and is causing considerable harm, management costs are higher but with fewer benefits. The best scenario is to keep new ANS invasions out of the United States. The Lacey Act allows for the designation of injurious wildlife: “wildlife [not including plants or diseases] that is found through regulation or congressional action to be injurious to the interests of human beings, agriculture, horticulture, forestry, wildlife or wildlife resources of the United States.” Pathways for injurious wildlife include transportation (shipping containers and packing materials, travelers, vehicles, and ballast water, to name a few) and commerce in living organisms (such as for aquariums, aquaculture, and food). The FWS has been guilty itself in bringing Asian carp into the United States in the 1970s.

Deputy Director Dan Ashe has called for Lacey Act reform, asking that the Lacey Act be made “a tool for 21st Century Conservation: One that is effective in controlling import and interstate commerce in injurious species, preventing exotic invasive species from establishing naturally reproducing populations.” Martin then gave a brief history of the Lacey Act, from its passage in 1900, the authority it provides, and its weaknesses, including the many required determinations (National Environmental Policy Act [NEPA] analyses) and the slowness of rule promulgation. The process for adding large constrictor snakes was a massive undertaking, resulting in over 56,000 public comments. It has also been focused largely on containment.

Martin emphasized the need to look at international prevention. To that end, risk screening must improve. Best predictors of a species’ invasiveness are its history of invasion and a climate/habitat match. Global information databases are helping resource managers understand the history of invasiveness for such species as Nile perch (*Lates niloticus*), stone moroko (*Pseudorasbora parva*),

Prussian carp (*Carassius gibelio gibelio*), and others. Climate matching is providing another piece of information. He showed a climate-matching map for stone moroko, showing a high proportion of available habitat in the United States.

The GLRI, of which the FWS is a partner, has 1,400 risk assessments in draft and 600 more in process during FY12. Results of risk screenings for stone moroko, Wels catfish, (*Silurus glanis*) Prussian carp, Nile perch, and Crucian carp (*Carassius carassius*) show their histories of invasiveness and climate matches to be high. Great Lakes states are using these results to promulgate their own regulations. Results are also providing good information that the FWS could use to promulgate its rulemakings.

Martin talked about efforts regarding working with industry and AFWA on stone moroko issues, moving regulations through the administrative process, assessing species that are not in trade but are at high risk for invasion, meshing State and federal regulations to provide a true biosecurity approach, and using nonregulatory approaches as well. He also commented on the FWS's Tiger Team's efforts to streamline the process. Group members believe they can list multiple species a year (by genera or family) with a modest budget.

19. Informational: Panel Updates

Mississippi River Basin Panel (MRBP)

Eileen Ryce, Montana Fish, Wildlife and Parks, highlighted several MRBP accomplishments. The last panel meeting was held in December in Oklahoma City, Oklahoma. Several MRBP members participated in NISAW. The Prevention and Control Committee requested \$60,000 from the panel for a triploid grass carp (*Ctenopharyngodon idella*) review. This program is critical and will provide good information for all panels. As State travel budgets shrink, significant panel funding is being spent on getting members to meetings.

Great Lakes Panel (GLP)

Phil Moy, Wisconsin Sea Grant Institute, reported on the GLP meeting that was held November 30 through December 1 in Ann Arbor, Michigan. The meeting featured a rapid response case study roundtable and a session on preventing Asian carp in the Great Lakes. The next meeting will be a joint meeting with NEANS. The joint meeting will be held in Rochester, New York, on May 22–24, 2012. Moy reported on the following subcommittee activity: the Information and Education Subcommittee is exploring the use of social media to advance priorities, the Research Coordination Committee is reviewing grass carp diploid contamination in triploid shipments, and the Policy Coordination Committee is working on a committee priorities document. An ad-hoc Nominating Committee prepared a ballot of GLP officers and at-large members in preparation for the GLP biennial elections to be held in spring 2012. Installation of the newly elected GLP officers and at-large members will occur at the spring meeting. Finally, GLP staff worked with the Chair of the Policy Coordination Committee to provide feedback on the 2013–2018 Strategic Plan.

Gulf and South Atlantic Regional Panel (GSARP)

Ballard reported on the GSARP meeting held April 2011 and three projects being funded by the GSARP. The Invasive Species Travelling Trunk project produced two complete trunks and enough materials for a third trunk. The Education and Outreach workgroup is reviewing the accompanying talking points after which the finished trunks will be made available to the public through the GSMFC. At the end of the first year of the 2-year Trojan Y Chromosome Eradication of Invasive Fish project, sex-specific DNA for three invasive species (Nile tilapia [*Oreochromis niloticus*], African jewelfish [*Hemichromis bimaculatus*], and silver carp [*Hypophthalmichthys molitrix*]) were used in PCR reactions to produce DNA fragments for analysis. No sex-specific markers have yet been identified, and screening will continue. Finally, researchers working on the Reproductive Sterility as a Tool for

Prevention and Control of Invasive Aquatics project have irradiated snails at different doses and determined the proper dose for sterilizing adults. Researchers are also exploring drug interactions that cause triploidy in the snails. Finally, Ballard reported the GSARP is producing a newsletter to summarize their meetings, and several new sightings of invasive species have been reported that suggest range expansions.

Northeast Aquatic Nuisance Species Panel (NEANS)

Nancy Balcom, Connecticut Sea Grant Extension Program, announced NEANS held their 10th anniversary meeting in Providence, Rhode Island, where they conducted a second Hazard Analysis and Critical Control Points (HACCP) training with the FWS. The NEANS online guide and website revisions are finished. NEANS partnered with the Rhode Island Coastal Resources Management Council to develop a regional early detection and rapid response framework for the Chinese mitten crab (*Eriocheir sinensis*). Additional activities include conducting a hydrilla (*Hydrilla verticillata*) workshop to plan for a larger hydrilla summit, completing and printing an Asian Clam Watch Card, and co-hosting the second Didymo (*Didymosphenia geminata*) conference to be held on the East Coast in fall 2012.

Western Regional Panel

Dalton, Utah Division of Wildlife, reported the last WRP meeting was held in Oakland, California, in October. The next meeting will be September 4–7, 2012, in Salt Lake City, Utah. The WRP recently held a meeting with boat manufacturers to discuss ballast tank design for recreational boats. They want to work with boat manufacturers to develop ballast tanks that can be drained and cleaned. Other activities include updating the “Threats to the West” brochure, releasing a position description and Request for Proposals for a new WRP Coordinator, and participating in NISAW and visits to Capitol Hill to discuss Quagga-Zebra Mussel Action Plan (QZAP). Finally, the WRP is working with the Oregon Sea Grant and National Sea Grant Law Center to put on an Assistant Attorney Generals conference that addresses the spread of invasives via the recreational boating pathway. The workshop will occur August 20–24, 2012, in Phoenix, Arizona.

Mid-Atlantic Regional Panel

Sarah Whitney, Pennsylvania Sea Grant, reported that MARP held their spring meeting on Tuesday, May 1, 2012, here in Annapolis, where they reviewed the 8 proposals they received in response to their RFP. The proposals addressed AIS eradication and control, reporting and monitoring, survey and risk assessment, and public and professional education. MARP will be funding 3 projects. Since 2007, they have funded 24 projects in the Mid-Atlantic region at a cost of \$210,000, leveraging over \$424,000 in partner funds.

Panel Recommendations

Panel recommendations are presented below in bold font; individual discussions, if any, follow each recommendation.

NEANS

1. Continue to provide funding for State management plan implementation.

Martin reiterated that Don MacLean, FWS, has developed 3 outreach documents regarding the importance of funding State ANS management plans. He also encouraged members and state representatives to engage in the approach AFWA is undertaking. Money is being directed through State plans for high-priority work from the federal perspective, but funding can only change in Congress.

2. National species-specific funding priorities should be funded outside of the allocations for the State management plans, which have already identified priority actions the respective state or basin needs to take to prevent, detect, and control species most threatening to their region.

Martin noted that the FWS fisheries program underwent a review by a Presidential Federal Advisory Committee Advisory Act (FACA) group. This review provided several recommendations, one of which was developing a comprehensive management planning process that includes strong partnership engagement to develop priorities. The fisheries program will be working on this process and sharing its findings at the fall ANTSF meeting.

3. Standardize the funding request process so that proposals are due at or around the same time each year.

Although money is not available at the same every year, the process could be organized at the same time.

WRP

4. Continued funding of State plan implementation. The WRP requests that the ANSTF support efforts to provide funding for State management plan implementation and continue supporting funding for ANSTF panels.

5. ANSTF member agency involvement in Attorney General (AG) workshop where appropriate. The WRP invites ANSTF member agencies with legislative and legal authorities (i.e., Lacey Act, Clean Water Act, etc.) to participate in the 2012 AG workshop.

6. New Zealand Mud Snail (NZMS) Working Group. The WRP requests that the ANSTF support revitalization of the NZMS working group to update the New Zealand mud snail management and control plan and reinstate the annual conference.

The ANSTF agreed to revitalize the NZMS working group so the management plan could be updated and to look for other mechanisms for communication. The WRP Coordinator will organize this working group.

Gulf and south Atlantic Regional Panel

7. The ANSTF develops and administers an annual standardized survey to track the amount of money spent on invasive species issues by states and federal agencies similar to the one used in GAO/RCED-00-219. The data collected by this effort would give the Task Force a better understanding of the total amount of funds dedicated to invasive species control, management, research, and prevention nationally and allow them to track changes in funding from year to year. This information could also be used to justify future funding needs to Congress and push for full appropriation of authorized funding levels.

Federal invasive species funding has been tracked over time; State funding is not tracked. Parsing out aquatic and terrestrial federal funding would be possible; however, the States would have to voluntarily provide their funding data. The current data through 2012 is now available and can be shared with the ANSTF.

The ANSTF agreed to share the budget data that were shared with GAO and the Regional Panels agreed to develop a standard survey to submit to the States that asks for State budget data.

8. The ANSTF does everything in its power to maintain funding for approved state ANS plans in FY2013. Without this funding, several long-term ANS control/management projects in the states would be significantly reduced or canceled.

Informational: National Ocean Policy Update and Aquatic Invasive Species Issues and International Conference on Aquatic Invasive Species

An International Conference on Aquatic Invasive Species will be held in spring 2013 at Niagara Falls, Ontario, Canada.

Brady reported that the National Ocean Council released a small draft *National Ocean Policy Implementation Plan* during summer 2011, conducted public meetings around the country, and developed a more comprehensive document and released it for formal public comment on January 12, 2012. The draft plan describes more than 50 actions the federal government will take to improve the health of the ocean, coasts, and Great Lakes. The public comment period was extended to the end of March. The comments received are available and listed chronologically on the White House website.

The plan contains an action to locate, control, and, where possible, eradicate invasive species populations as well as 5 specific milestones related to aquatic invasive species (AIS). If the schedule does not change, a final plan should be available the first week of June 2012.

Public Comment

No public comments were submitted.

Meeting Summary

The next ANSTF meeting is scheduled for Arlington, Virginia, on November 14–15, 2012.

Adjourn.

The meeting adjourned at 5:00 pm.