

**GULF & SOUTH ATLANTIC REGIONAL PANEL  
ON AQUATIC INVASIVE SPECIES  
MINUTES**

**Wednesday, April 5 - Thursday, April 6, 2006  
Atlanta, Georgia**

Chairman David Yeager called the meeting to order at 9:00 am. The meeting began with introductions of the Panel members and guests. The following were in attendance:

**Members**

Diane Altsman, EPA/GOMP, Stennis Space Center, MS  
Marilyn Barrett-O'Leary, Louisiana Sea Grant, Baton Rouge, LA  
Harry Blanchet, LDWF, Baton Rouge, LA  
Paul Carangelo, Port of Corpus Christi Authority, Corpus Christi, TX  
Earl Chilton, TPWD, Austin, TX  
Walter R. Courtenay, USGS, Gainesville, FL  
Steven de Kozlowski, SCDNR, Columbia, SC  
Dale Diaz, MDMR, Biloxi, MS  
Pam Fuller, U.S. Geological Survey, Gainesville, FL  
Scott Hardin, FFWCC, Tallahassee, FL  
Leslie Hartman, AL Marine Resources Division, Dauphin Island, AL  
Ted Hendrickx, Georgia DNR, Social Circle, GA  
Tom Jackson, NOAA/NMFS/SEFSC, Miami, FL  
Chuck Jacoby, University of Florida/Florida Sea Grant, Gainesville, FL  
Herb Kumpf, Banner Elk, NC  
Jim Long, National Park Service, Atlanta, GA  
Ronald R. Lukens, GSMFC, Ocean Springs, MS  
Roberto Mendoza, Universidad Autónoma de Nuevo Leon, Mexico  
John E. Meyers, U.S. Coast Guard, New Orleans, LA  
Harriet Perry, USM/GCRL, Ocean Springs, MS  
Bob Pitman, USFWS, Albuquerque, NM  
George Ramseur, Land Trust for the Mississippi Coastal Plain, Ocean Springs, MS  
Dennis Riecke, MDWFP, Jackson, MS  
John Teem, FL Dept. of Agriculture and Consumer Services, Tallahassee, FL  
Bruce Thompson, LSU Coastal Fisheries Institute, Baton Rouge, LA  
Jay Troxel, USFWS, Atlanta, GA  
David W. Yeager, Mobile Bay National Estuary Program, Mobile, AL

**Staff**

Nancy K. Marcellus, GSMFC, Ocean Springs, MS

**Others**

Noel Burkead, USGS, Gainesville, FL  
Nicole Cass, Port of Houston Authority, Houston, TX

Chuck Coomer, Social Circle, GA  
Bud Freeman, Georgia Museum of Natural History, Athens, GA  
Linda Kelsey, USFWS, Atlanta, GA  
Jonathan Moczygemba, Texas A&M University, Kingston, TX  
Scott Newsham, ANSTF/USFWS, Arlington, VA  
Pamela J. Schofield, U.S. Geological Survey, Gainesville, FL  
Susan Wilde, USC/SCDNR, Charleston, SC

### **Public Comment**

Yeager provided the opportunity for public comment. No public comments were received.

### **Review and Adoption of Agenda**

Jim Lester was unable to attend the meeting due to illness, and his report "Galveston Bay Activities" was removed from the agenda. Lukens also asked that Scott Newsham be added to provide a report on Task Force activities in lieu of the Administrative Report scheduled for 11:00 am on Thursday. **Bruce Thompson made a motion to adopt the agenda with those changes. Leslie Hartman seconded the motion and the agenda was adopted.**

### **Review and Approval of Minutes (11/30 - 12/1/05)**

Lukens mentioned that he had received some comments via email and incorporated them into the minutes. **Marilyn O'Leary made a motion to approve the minutes from the 11/30 - 12/1/05 meeting held in Corpus Christi, Texas. Harriet Perry seconded the motion and the minutes were approved.**

### **Test of Rotenone as a Potential Control for Nonindigenous Swamp Eels**

Pam Schofield of the U.S. Geological Survey in Gainesville, Florida, gave a PowerPoint presentation entitled "Test of rotenone as a potential control for nonindigenous Asian swamp eels." Results of this research project, which is funded by the U.S. Geological Survey, are pending publication. Copies will be made available at a later date.

### **Swamp Eel Activities in Georgia**

Bud Freeman from the Institute of Ecology, University of Georgia and the Georgia Museum of Natural History, provided a PowerPoint presentation entitled, "An Update: Status of Asian Swamp Eels in Georgia."

### **Summary**

- Mid-level predator
  - Primarily feeding on invertebrates in ponds
- New food item for wading birds and others

- Observed herons feeding on eels
- Breeding in 3 ponds and possibly marsh
  - Young-of-year eels captured in all areas

#### Chattahoochee Nature Center

- Discovered 1994
- Introduced c. 1990
- Breeding population in 3 ponds
- Direct access to marsh
- UGA studies began in 1998
- Current study objectives:
  - Assess population status
  - Assess potential impacts to native fauna
  - Evaluate control/eradication options

#### Control Options

Swamp eels are highly adaptable to a diverse number of environments - burrowing, air breathing, travel on land

- Pesticides (rotenone, antimycin)
- Trapping (removal)
- Dredging/Draining
- Electric barriers
- Modified outflows

#### Lab Studies

- Effects of Antimycin-A
  - Tested young eels ( $3.53 \pm 0.98$  cm SVL)
  - Positive controls: golden shiner (*Notemigonus crysoleucas*)
  - 0, 2, 5, 10, 15, 100 ppb (nL/L) Fintrol®
  - 44 h observation
- Aquabiotics, Inc. recommends:
  - 5 ppb for control of scaled fishes
  - 15 ppb for hardier fishes
- Conclusions
  - Young eels unaffected by Antimycin
  - Effective on positive controls
  - Chemical control may not be option

#### Containment Options

- Eliminate access to marsh
  - Reconfigure Kingfisher outflow
    - close current outflow
    - install deep-water screened standpipe
  - Redirect Frog Pond Outflow
    - elevate pond berm

- direct outflow into Kingfisher
- Erect silt fences
- Reduce total numbers
  - Spring-time electrofishing
    - removes spawning adults
  - Summer leaf-litter traps
    - removes spawned juveniles

### Conclusions

- Eels resistant to standard chemical control
- Eels susceptible to trapping
  - Adults: electrofishing
  - Juveniles: leaf-litter traps
- Ponds can be reconfigured
  - Eliminates access to marsh
  - Greatly reduces immigration potential

Funding and support were provided by the U.S. Fish and Wildlife Service, the Georgia Department of Natural Resources, the Chattahoochee Nature Center, and the National Park Service.

### **Taxonomic Experts Database**

Pam Fuller indicated that one of the topics the Panel was interested in was creating a database of taxonomic experts. After traveling to other Panel meetings, Fuller found they wanted to do the same thing. The Task Force agreed to fund a cooperative project to develop this database, which will ensure that the Panels will not be duplicating effort. A conference call with interested parties will be held next week. The USGS database programmer in Fuller's office is currently building the database.

It is designed to be a two stage program. The general public will have access to the first stage and will be directed to the individual state programs. The state program will serve as the first filter. If the state person cannot identify a species, the state person will have access to the next stage, which is the taxonomic experts.

The initial project is to build a taxonomic experts database. There may be an opportunity to expand on the initial project to include other invasive species experts. Fuller asked if any Panel members would like to be involved in this group and participate in the conference call to notify her. Fuller added that the Research Committee of each Panel will discuss how to populate the database.

Lukens added that this is an opportunity for all states and Panels to participate. Each state or Panel will make the decision whether or not to participate.

### **Status of State Plans/Program Updates**

Florida - Scott Hardin reported that Florida has had a plan since 2003 dealing with both terrestrial and aquatic species. They are in the process of implementing the plan. Lukens noted that to be eligible for ANS funding the plan must be formally submitted to the Task Force with a transmittal letter

signed by Florida's Governor. Of the 18 actions items in the plan, they have made progress on approximately 10 of them.

Some items they are working on include: a pilot surveillance network; a photo guide on egg masses of channel apple snails; reinfestation from private lands; reexamination of all rules and regulations looking for duplications and gaps; standardized reporting format on money spent on invasives in the state; and legislation proposed in Florida to regulate certain reptiles in the state. Finally, Hardin gave a PowerPoint presentation on the Gambian Pouch Rat in the Florida Keys.

Alabama - Leslie Hartman reported that they are in the process of developing their state plan. They have an Executive Order signed by the Governor to accomplish the task. They have held three meetings and prioritized their species of interest and identified relevant regulatory agencies. They are in the process of writing and reviewing the species profiles. Another meeting will be held next week. They hope to complete the plan under the current administration (end of 2006).

Mississippi - Dale Diaz informed the Panel that a key person in their plan development, Phil Bass, has retired from Mississippi DEQ and is now working for the Gulf of Mexico Program. They continue to work on their plan. A meeting is scheduled for June and the goal is to have a rough draft to review. They hope to have the plan completed by the end of 2006.

Diaz added that Hurricane Katrina created lot of disturbed habitat which is conducive to invasive species. Debris removal is also creating a lot of damaged habitat, since contractors are paid on volume of debris removed. They have recently received funding for a project on post-Hurricane Katrina giant salvinia distribution. Plans are to start that project by mid-April.

Louisiana - Harry Blanchet reported that the Louisiana plan has been developed. Last month their Governor signed and forwarded it to the National ANS Task Force. The Task Force will be meeting in May, and approval of the Louisiana plan is on the agenda. Their group continues to meet regularly. Some topics of discussion include: distribution of formosan termites since Hurricane Katrina; presentation on redistribution of the Rio Grande cichlid; new information on black carp; and an LSU project to slice silver carp to make crawfish bait. They also have legislation introduced dealing with private ownership of constrictors. This will provide some control over large snake ownership. They were recently involved in a rapid response action involving giant salvinia in one of their local lakes. On March 11, while fishing, a biologist spotted some giant salvinia. It was positively identified on Monday and they started surveying on Tuesday. The following Monday, 6 plant control crews began treatment. It is an ongoing problem and management options are currently being reviewed.

Texas - Earl Chilton reported that the Texas plan is incomplete. It was submitted for preliminary review last fall, and they have received comments. They were hoping to have those comments incorporated into the plan before the May meeting of the Task Force, but it appears doubtful. The comments should be incorporated before the next meeting of the Task Force, following the May meeting. To be eligible for certain funding, they are in the process of putting together a Texas State Invasive Species Council. Chilton also gave a PowerPoint presentation entitled, "Lake Austin Hydrilla."

Georgia - Ted Hendrickx reported that their plan is gaining momentum, and interest is building. They have begun the writing phase and are in the process of developing an internal briefing paper. The Georgia Invasive Species Task Force is complete. It was formed from a preexisting organization. A division coordination meeting is planned for next week, and they will brief the Director and Assistant Director on what they plan to bring before Governor. Hopes are to have a first state agency coordination meeting this summer to get consensus on species and pathways.

As part of a \$10,000 grant, Georgia developed an outreach display on invasive species. Hendrickx brought the display to the meeting and received many favorable comments. They also hope to print more of the brochure "Aquatic Pests Introduced from Aquariums and Water Gardens." They did a TV show in January on invasive species and are also doing a Georgia Outdoors show.

South Carolina - Steve de Kozlowski distributed copies of a publication identifying aquatic plants with illustrations. The IAFWA communications project is almost complete. This project is designed to distribute information on aquatic invasive species with boat ramp signs and the Agency's rules and regulations publication. After getting prices for a consultant to do their state plan, they have decided to take on the task themselves. The target date is Spring 2007.

Other state activities included completion of the annual aquatic management plan, targeting 28 bodies of water around the state. De Kozlowski was recently informed of new hydrilla pond in South Carolina. They have had increased numbers of these small ponds with hydrilla. They are in the process of investigating the extent of infestation of phragmites and focusing on controlling this species. They are also addressing ways to address invasives species on private property. With phragmites, they have established a cost sharing program with the landowner to control the species. Another area of interest is beach vitex - vines - impacting the ability for sea turtles to nest. They have added a link on their website to the GSMFC website.

### **HACCP Workshop - Mexico**

Roberto Mendoza provided a PowerPoint presentation entitled "Utilización de HACCP, Para El Manejo de Riesgos de Especies Invasoras - MEXICO, D.F., Febrero 22-23, 2006." The presentation reviewed the HACCP training program which had been translated to Spanish. Bob Pitman assisted in coordinating the HACCP workshop. Mendoza indicated that the training workshop was considered very successful.

### **Species Update**

Pam Fuller provided a species update PowerPoint presentation.

#### **Southeast**

- Red Sea bannerfish (*Heniochus intermedius*)
  - Marine waters off Palm Beach County
- Pirapatinga, red-bellied pacu (*Piaractus brachypomus*)
  - Lay Lake, Coosa River, AL

- Red River near Acme, LA
- Guntersville Lake, AL
- Caney Lake, LA

### Florida

- 2 “new” established species
- Both in South Florida
  - Eastern happy (*Haplochromis callipterus*; *Astatotilapia calliptera*)
    - African Cichlid; aquarium species
    - First collected 1997
  - Bristle-nosed catfish (*Ancistrus* sp.)
    - First collected 2001

### Elsewhere

- A Parasitic Copepod (*Neoergasilus japonicus*) - Great Lakes
- Giant Snakehead (*Channa micropeltes*) - Tennessee
- American Alligator (*Alligator mississippiensis*) - New York, California, and Iowa
- Northern Snakehead (*Channa argus*) - Lower Delaware, Pennsylvania
- Chinese Mitten Crab (*Eriocheir sinensis*) - Lake Superior

### Hawaii

- 122 fish species
- 7 new species to our database
- At least 8 species expanded to new islands

### **Miscellaneous Comments**

First place Gulf Guardian Partnership Awards were presented to Pam Fuller and Jim Long for their participation in AMRAT.

George Ramseur informed the Panel that as of mid-March he is no longer employed by The Nature Conservancy. He has taken a position with Land Trust for the Coastal Plain, which focuses on the six coastal counties in Mississippi. He will continue his affiliation with the Panel as a member from a non-profit organization.

The meeting recessed at 4:50 pm.

The meeting reconvened at 9:00 am.

## **Public Comment**

Yeager provided the opportunity for public comment. No public comments were received.

## **Hybridization Between Red Shiners and Native Shiners**

Noel Burkhead of the U.S. Geological Survey in Gainesville, Florida, gave a PowerPoint presentation on the hybridization between red shiners and native shiners. Results of this research project are pending publication. Copies will be made available at a later date.

## **Update from the North American Brown Tree Snake Control Team**

Jonathan Moczygemba, a graduate student from Texas A&M, Kingston, gave a PowerPoint presentation updating the Panel on activities of the North American Brown Tree Snake Control Team (NABTSCT).

The mission of the NABTSCT is to prevent the invasion of brown tree snakes into continental North America through education and awareness and rapid response assessments of potential sightings via a partnership of stakeholders.

The NABTSCT was formed in 2002:

- To compliment group of Aquatic Nuisance Species Task Force, and
- To inspire and facilitate communication, cooperation, and understanding within and between agencies and organizations and to provide coordination of efforts between agencies concerning brown tree snake issues.

The following items can be found on the NABTSCT web site, ***www.NABTSCT.net***:

- Directory
- Mission Statement
- Partners
- Annotated Bibliography
- Educational Presentations

Coming soon to the web site:

- BTS ID and Native Look-a-likes
- Rapid Response
- Potential Pathways and Maps

Team activities for 2006:

- New Watch Cards



- Working on Rapid Response Number (24 hour toll free number)
- Web I.D.

Moczygemba noted two areas where he would like assistance from panel members. The first is the need for photos, both close-ups of native snake species for web I.D. and brown tree snake photos. The second is the need for contact information for invasive species coordinators for state and federal agencies for the rapid response plan.

### **Avian Vacular Myelinopathy**

Susan Wilde, SCDNR, gave a PowerPoint presentation entitled, "Linking Invasive Aquatic Plants, a Novel Cyanobacterial Species and Avian Vacuolar Myelinopathy in Southeastern Reservoirs."

The primary birds affected are American coots (1,000s) and bald eagles (at least 100). Also affected are mallards, ring-necked ducks, buffleheads, American wigeon, Canada geese, great horned owls, and killdeer.

Emergent Eagle Disease (first documented occurrence - DeGray Lake, Arkansas - November 1994)

- 29 bald eagles were found dead or dying
- Eagles and coots neurologically impaired
  - Diagnosis
    - no consistent gross abnormalities in eagles or coots
    - lesions are present in the white matter of the brain tissue
- Deaths occur from October to March while birds overwinter on reservoirs
  - Extensive diagnostic examinations
    - no infectious disease agents
    - no known toxins that cause brain lesions
- Coots and other waterfowl contract disease on site within as few as 5 days
- AVM is not contagious
- Eagles and other predatory birds contract disease by ingesting affected birds

### **Avian Vacuolar Myelinopathy**

Current working hypothesis - food chain linkage

- Stigonematales species that grows on aquatic plants produces the neurotoxic AVM agent
- Aquatic plants with toxic algal epiphytes are consumed by coots
- Sick coots are consumed by eagles

Genetic Analysis and Culturing an Epiphytic Cyanobacterial Species Associated with AVM Bird Deaths

### **Prime Suspect**

- Abundant colonies of an undescribed epiphytic cyanobacterium
- Initially identified as *Hapalosiphon fontinalis*

- Now known to be a new closely related species in the order *Stigonematales*
- Submitted the 16S sequence to GenBank - AY785313
- Created a Real-Time PCR assay specific to the *Stigonematales* species

#### Culture Progress

- Field samples of the targeted cyanobacterium have been cultured
- Experimenting with several media to retain/induce toxin production
- BG-11<sub>0</sub> + hydrilla extract
- BG-11 results in rapid growth

#### Initial Feeding Trial

- Culture material was grown in BG-11<sub>0</sub> at 27C for six weeks
- Cold shocked before harvesting
- 6 coots were gavaged whole cell material followed by a rinse of BG-11<sub>0</sub> media
- Ducks were gavaged daily for 13 days at Clemson University
- None of the coots became symptomatic or had brain lesions

#### Cyanobacteria Research

- Culture strains lose toxicity
- Evidence of certain environmental triggers for toxin production
- Looking at environmental conditions when birds become positive
- Started new strains from 2005-2006 sampling season

#### Future Directions

- Improve the Real-Time PCR assay to yield quantitative results for suspect cyanobacterium
- Continue to investigate environmental conditions that induce toxin production
- Develop toxin positive laboratory cultures.

Funding for these projects was provided by US CDC, SCE&G/SCANA, Santee Cooper Power, APMS/AERF, and the US Army COE.

#### **Salinity Tolerance of Goldfish, *Carassius auratus*, A Widely Distributed Non-native Cyprinid in the USA**

Pam Schofield of the U.S. Geological Survey in Gainesville, Florida, gave a PowerPoint presentation entitled "Salinity tolerance of goldfish *Carassius auratus*, a widely-distributed non-native cyprinid in the U.S.A." Results of this research project, which is funded by the U.S. Fish and Wildlife Service - Region 4, are pending publication. Copies will be made available at a later date.

#### **ANS Task Force**

Scott Newsham reported that he is in his 7<sup>th</sup> month as Executive Secretary of the ANS Task Force. The next meeting of the Task Force is scheduled for the week of May22 in Cape Cod, Massachusetts. Items to be discussed include a strategic path for the Task Force and state plans. Eighteen plans have been approved. They will discuss funding and how to decide how much each state gets.

Funding for 2006 is consistent with past years. In order for funding to be increased, it will probably need congressional action. Newsham has been compiling a briefing book for the meeting. All items for the meeting, including a detailed agenda, will be on the Task Force web site for review.

At the last meeting they discussed developing a format for Regional Panel annual reports and sent that information to all Regional Panels. A standardized reporting format will make it easier to compile a report for distribution to Congress.

#### A Report to the Aquatic Nuisance Species Task Force for (Year)

104. Summary - Summarize regional panel aquatic invasive species program focus areas and key strategies. Two to four paragraphs. Committee/work group reports and status of state management plan development since last report are requested as attachments.
105. Major Accomplishments - Describe (bullets/short paragraphs) top 10 major accomplishments or developments from the panel perspective and highlight any innovations. Attempt to assign a broad category (i.e. P, DM, CM, EO, R)
106. Program Expenditures - Expenditures are not requested for 2005. The need for and scope of fiscal data will be discussed at the Spring 2005 ANSTF meeting.
107. Programmatic Needs - Key outstanding regional AIS issues and recommended course of action. These would be considered as recommendations to the ANSTF.

A State ANS Expenditure Report, a spreadsheet template, will be discussed at the meeting in May.

Lukens indicated that he would send the format requirements to Panel members next week. The Panel members would then send their information to Lukens to summarize into one report.

Steve de Kozlowski made a motion that all non-federal Panel members provide a report of state activities to Lukens for the Panel's annual report. State fiscal information can also be provided, if available. Marilyn O'Leary seconded the motion and the motion passed.

Panel members also discussed the possibility of funding small projects that Panel wants to accomplish. Other panels use some of their Panel administrative money to fund projects. Interest from the Panel indicated that they would like to do this. Money available would be approximately \$5-8000 per year. Lukens noted that he would be hesitant about adding funds to another project that needs additional funding. Perhaps the Steering Committee could work out the details on how projects would be reviewed and approved.

#### **Work Group Reports**

Education/Outreach Work Group - Chuck Jacoby reported on activities of the Education/ Outreach Work Group. The following is a list of their current activities:

1. To provide advice to Intel, an organization responsible for science fairs. List of recommendations forwarded to ANS Task Force a while back.
2. Conference in Key Biscayne.
3. Poster from Oregon Sea Grant displaying classrooms as a pathway. Plans are to get a copy of the poster and brochure. Marilyn O'Leary did mini version of this and is making it available for teacher conferences, etc.
4. Bait bucket stickers are also available - "Don't dump your bait."
5. Having materials translated into Spanish. Also investigating the possibility of translating material into other languages.
6. Links to Panel members websites to Habitatatude and Stop Aquatic Hitchhikers websites.
7. Working with Master Naturalist Programs. The concept is to give them some training on invasive species and develop an initial materials package.
8. Inventories of educational materials. Portland is conducting a pilot study and plans are to investigate using their framework to develop a database of available education and outreach materials.
9. Priority setting - providing National Sea Grant Program with priority areas for outreach projects.

Pathways/Prevention Work Group - Pam Fuller reported on pathways analysis report, a 50 page report using the NAS database to examine pathways and species relationships. The Work Group reviewed the report and recommend adding plants to make the database more complete. The states agreed to help with this. They added an additional pathway: aquascaping. They conducted a test using a questionnaire and plans are for each state to go through all nine pathways. They will use report to assist in determining regional and state priorities. This report, once completed, will be submitted to the ANS Task Force.

Research/Development Work Group - John Teem reported that the Research/Development Work Group has been working to finish defining research priorities for the Regional Panel. One strategy was to ask researchers in various states what they thought were priorities. The best response was from Louisiana. That strategy did not produce much data. They then asked individuals by email to submit research priorities. Don Schmitz presented a list of priorities from Florida DEP and added that he got a list from most states. They are also putting together a species of concern list. There was question of how broad or specific a priority should be. They came up with the following list:

- Research Need - to do long term studies.
- Research Need - increased systematic work on nonnative species that are hard to identify.
- Research Need - encourage multi-state approaches to deal with species of concern.
- Conduct more rapid assessments in both marine and freshwater, and develop manual on how to conduct rapid assessments
- Identify normal chemical and physical habitat parameters for non-native species

It was pointed out that the Work Group did not address socio-economic impacts on dealing with invasive species. Teem indicated that they will address that issue via email.

In regards to populating the taxonomic database - states should assign representatives from each state to serve as a first and second tier person, and send that contact information to Teem.

## **SEAFWA Invasive Species Committee Report**

Steve de Kozlowski reported on the Southeastern Association of Fish and Wildlife Agencies 60<sup>th</sup> Annual Conference to be held in Norfolk, Virginia, November 5-8. The SEAFWA conducts an annual conference each fall to provide a forum for presentation of information and exchange of ideas regarding the management and protection of fish and wildlife resources throughout the nation with emphasis on the southeast. SEAFWA has approved a special session on invasive species to be held at that conference. The session will consist of 3 or 4 presentations, but the speakers and topics have not yet been selected. After the presentations there will be a panel discussion on invasive species issues. One of the concurrent sessions will be on invasive species with a facilitator for discussion. Information is available on the SEAFWA website: [www.seafwa.org](http://www.seafwa.org).

## **Next Meeting**

The Panel decided on the weeks of October 2 and October 30 for the next meeting. Locations selected were Charleston, South Carolina, Savannah, Georgia, and Tampa, Florida. Lukens will use these suggestions as guidance in scheduling the next Panel meeting.

## **Public Comment**

Jay Troxel introduced Linda Kelsey of the U.S. Fish and Wildlife Service.

John Meyers indicated that this will be his last meeting as a Panel member because he is being reassigned. The U.S. Coast Guard will appoint his replacement.

No public comments were received.

***There being no further business, the meeting adjourned at 3:19 pm.***