INLAND FISHERIES MONTHLY REPORT June 2011

Trout

- Western Region II staff will conduct electrofishing surveys on two ponds at Fort Ritchie in Frederick County on June 22. The staff is negotiating with management at the facility to get the ponds open to the public for fishing. Once the fish populations in the ponds are known, staff will discuss management options with the facility managers.
- Central Region staff installed Onset temperature recorders into Silver Run, Walker Run, Gunpowder Falls below Gunpowder Road, Gunpowder Falls above Falls Road and below Blue Mount Road in Baltimore County, the Good Hope tributary to Paint Branch at Hobbs Drive and the Patuxent River tailwater at Haviland Mill Road in Montgomery County to continue monitoring water temperatures and the potential for trout growth and survival.
- Western Region II staff deployed Tidbit temperature recorders at two sites on Beaver Creek, 2 sites on Black Rock Creek, 4 sites on Hunting Creek, and 6 sites on Antietam Creek to monitor summer water temperatures and evaluate the suitability of those temperatures to the survival and growth of trout.
- Western Region I staff obtained and stocked fingerling trout in regional waters to supplement existing populations. Fingerling trout were stocked in Western Maryland's special management trout fishing areas including: 18,438 brown trout fingerlings in the North Branch Potomac River's Zero Creel Limit Area and 15,247 brown trout fingerlings in the NBPR Catch and Return Trout Fishing Areas (source Murley Branch Spring). Also, Albert Powell Hatchery supplied 11,150 rainbow trout that were stocked into the Youghiogheny C&R Area by Bear Creek personnel.

Recreational Trout Angling

- Central Region staff continued to assist hatchery personnel from Albert Powell and Unicorn Hatcheries with the stocking of 8,920 rainbow trout as the spring trout season was concluded with a very satisfied and appreciative trout angling community. A group of volunteers who assist with stocking in northern Baltimore County and Harford County provided a streamside cookout and picnic for the Central Region and Albert Powell Hatchery staff following the final stocking of the lower Gunpowder Falls.
- Eastern Region staff stocked Big Elk Cree with rainbow trout to diversify and improve spring angling on the Eastern Shore. The 1350 rainbows should not affect the native species that inhabit each ecosystem, since they are usually harvested quickly by anglers.
- Western Region II staff helped stock trout from a cooperative fish rearing site. Adult rainbow trout reared by the Potomac Valley Fly Fishermen (PVFF) at the Montevue Spring in Frederick were hauled and stocked into the Hunting Creek tailwater in Cunningham Falls State Park. PVFF members seined the trout from the facility and assisted with the stocking efforts. Hunting Creek is a fly-fishing-only, catch-and-return trout fishing area. Stocked trout supplement the existing population of wild brown trout.
- Western Region II completed the scheduled trout put-and-take stocking and stocked over 500 adult brown trout into Owens Creek during the beginning of June. Owens Creek is a special regulation trout fishing area that limits anglers to catch-and-release fishing using

artificial lures only from June 1 through the end of February. From March 1 through the end of May put-and-take regulations apply.

• Western Region II technician Josh Henesy stocked a total of 20,000 surplus rainbow trout fingerlings from Albert Powell Hatchery into Antietam Creek to maintain the current putand-grow trout fishery.

Data Management

• Biologist Todd Heerd continued updating the Central Region public fishing areas access database. There are currently 77 freshwater pond, lake and stream access locations for the Central Region.

Fish Rescue and Removal

- Central Region staff electrofished Friends Pond (aka Forest Hill Pond) in Forest Hill, Harford County on May 9. The goal was to remove any fish that were valuable to anglers or could be used for population management in other ponds. Fish removed from the pond were one Largemouth Bass (the <u>only</u> one encountered) that was stocked into Bynum Pond, two American Eels that were stocked into Bynum Run and two White Perch that were also stocked into Bynum Run. Other species observed were large numbers of stunted Brown Bullheads, stunted Green Sunfish, Banded Killifish, Golden Shiners, Goldfish, and two large Koi. No trout were encountered proving just how efficient our put-and-take anglers are at removing fish from stocked areas. The remaining fish were seined and removed by volunteers once the pond was drained to a small pool. The fish were to be used to feed birds at a rehabilitation center. Once the pond is drained and retrofitted, inland fisheries can restock it with largemouth bass and bluegill sunfish. The resulting population of fish should provide much better recreation for anglers within 2-3 years.
- Western Region II staff responded to a call for assistance by Frederick Animal Control regarding stranded fish. Staff conducted fish recovery efforts on a sediment pond located in the floodplain of the Monocacy River in the Deerbought community. Flood waters had inundated the pond, trapping a substantial number of carp and catfish when the river receded. Approximately 800 lbs of fish were returned to the Monocacy River.
- Following several Potomac River flood events this spring, Western Region II made multiple efforts to recover fish trapped in the C &O Canal and returned them to the river. Barge electrofishing equipment was used to capture fish, which were then transported by stocking truck to the nearest boat ramp. The majority of the trapped fish were carp, though other species including smallmouth bass, redbreast sunfish, rockbass, and channel catfish were also recovered. Assisting in this effort were several volunteers from the Mid-Atlantic Muskies forum.

Black Bass

• Unicorn Hatchery staff stocked 95,000 largemouth bass juveniles locally, as well as kept about 65,000 in ponds on site and at Horn Point lab for food training. Largemouth bass are predatory and need to be trained to accept a commercial pellet if they are to be kept for extended periods of time. The food trials aim to introduce bass to pellets at a younger age so reliance on pond zooplankton blooms for a food supply is diminished.

Major Rivers

• Western Region II staff continued to collect grab water samples at four sites on the mainstem Potomac and one site in each of the Potomac's largest MD tributaries, Conococheague Creek and the Monocacy River. Collections are made monthly and will continue through September. The samples will be used to document the temporal and spatial estrogenicity in the watershed. The results will hopefully shed some light on how and when intersex is induced in smallmouth bass.

Cold water streams

• Eastern Region staff deployed seven temperature recording devices into Cecil County coldwater streams. They will record stream temperatures hourly until they are removed in fall. These data have proven critical in several Environmental Reviews.

Environmental Review and Planning

- Western Region I Manager Alan Klotz participated in the MDE Land Reclamation Committee's (LRC) Phase II Bond Release Evaluations on 10 reclaimed strip mines (93 acres) in Garrett and Allegany Counties. Two reclaimed mines did not meet the revegetation requirements, and the operators will continue to work on the sites to improve them by this fall. The MDE Mining Program also presented two strip mine applications to the LRC, a 72-acre strip mine adjoining Dan Mountain Wildlife Management Area and the 434 acre strip mine adjoining Wolfden Run. Both applications are currently being reviewed by the Environmental Review Unit. Both applications required re-forestation of the sites, which was unanimously approved by the LRC. The Wolfden Run proposal can impact a sensitive trout population in the area.
- Western Region I Manager Alan Klotz provided comments on the Casselman River Watershed Acid Mine Drainage Remediation Project. One of the AMD Treatment sites was modified. The original Amish Road North Project involved a leach bed in the road side ditch, and an area in the existing wetland, both on the upstream side of the road, and both in flowing water. The project now has 2 small leach beds on the downstream side of the road. The only impact to the stream will be a buried pipe to convey water into the two leach beds. Total "foot print" is approximately the same size. This change was necessitated due to permit difficulties of constructing in-stream structures.
- Western Region I Manager Alan Klotz reviewed a proposal for a Poplar Lick Parking Lot. Since the closure of the Poplar Lick ORV trail, parking for the camping sites along Poplar Lick is very limited. Savage River State Forest Manager proposed to create a gravel parking lot for about 6 vehicles off Savage River Road near the southern end of Poplar Lick ORV trail. Fisheries Service supports this project to allow for angler access.
- Western Region I Manager Alan Klotz reviewed the Green Ridge State Forest proposal to sell 2.2 acres of isolated Virginia pine that is starting to fall out. This proposal is to salvage 32 cords of hard pine pulpwood while there is an operator on site and easy access from the neighboring property is permitted. All white pine within this stand will be retained along with the second growth mixed oak. This will result in salvaging the declining hard pine stand while releasing the residual mixed oak and white pine and restoring forest health and vitality. Fisheries supported the project.

American and Hickory Shad

• Restoration and Enhancement staff continued the American and hickory shad stocking effort supporting restoration of the Choptank River watershed. The 2011 culture effort has so far yielded 5.4 million larval and 144,000 early juvenile (~30 days old) hickory shad. Biologist Chris Mason and crew's strip spawning efforts of American shad from the Potomac River yielded 2.6 million larval and 320,000 early juvenile American shad. These hatchery-cultured young of year were stocked throughout the Choptank River and its tributary Tuckahoe Creek.

Atlantic Sturgeon

- Restoration and Enhancement staff continued the experimental husbandry and culturing efforts of adult and juvenile Atlantic sturgeon for future restoration efforts. Staff conducted spermiation trials with 13 adult male Atlantic sturgeon. Six of the fish were wild caught in the Chesapeake Bay and acquired through the Maryland Sturgeon Reward Program, and seven were born in captivity from Hudson River fish. Each fish was injected with LHRHa (an experimental hormone stimulating drug). The fish were evaluated 24 hours post injection. Six males from the original 13 produced viable sperm. These samples were delivered to Dr. Curry Woods at UMD College Park. Sperm samples with motility in the 90 to 95% range were cryo-preserved for future fertilization trials.
- Five sturgeon were loaned to the Delmarva Discovery Center for educational purposes.

Regulations

• Inland staff biologists John Mullican and Susan Rivers attended the public regulation meeting at the Boonsboro Community Center to discuss and receive comments regarding the proposal to list Boonsboro Pond as an Over 65, Youth, and Blind Trout fishing area. No one from the public attended and the Town of Boonsboro voted in favor of the regulation change. Staff forwarded the regulation to the Regulation section in Annapolis to be posted on-line for public comment before it is drafted for publication in the Maryland Register.

Tidal Black Bass

- Eastern Regional Staff assisted the Unicorn Hatchery Staff with bass culture activities. They completed the removal of largemouth bass broodstock from Unicorn Hatchery. The adult bass were transported back to their natal tidal rivers. Young bass reared in hatchery ponds were stocked into public freshwater impoundments, the Choptank River, and given to Horn Point Hatchery Staff for research.
- Southern Region biologists and Tidal Bass Manager Dr. Joe Love completed their work in Chicamuxin Creek on the Potomac River, comparing adult bass abundance in the sanctuary and other areas. Results are currently being analyzed.
- During the month of May, Southern Region biologists stocked 50,000 largemouth bass fry produced by Cedarville Hatchery at two locations in the Patuxent River.
- Southern Region biologists, with Tidal Bass Manager Dr. Joe Love, have continued work monitoring black bass tournaments in the state to ensure proper fish handling and to interact with anglers. Recently, angler Luke Clausen won \$125,000 at an FLW event on the Potomac with a four-day 20 fish bag totaling 69 lbs, 14 oz. During the event 308

anglers weighed-in over 5,300 lbs of bass, a testament to the wonderful bass fishery of the Potomac River.

Walleye

• For the first time since 2000, Western Region II stocked approximately 23,000 walleye fry/fingerlings into the Potomac River between Dam 4 and Dam 3 to supplement natural reproduction. Annual electrofishing surveys have documented an aging population with relatively low recruitment in recent years. The fingerlings were produced from brood collected from the Potomac. The Potomac River walleye fishery is very popular with anglers and provides excellent fishing during winter and early spring when other species are not as active.

Fish Health

- In May, Inland Fisheries received a shipment of purchased trout from Casta Line Trout Farm in Virginia. Staff noticed that the fish showed abnormal swimming behavior, so they collected several trout and shipped them to the Lamar Fish Health Laboratory for testing. The results found that some of the trout were infected with whirling disease (causative agent – *Myxobolus cerebralis*). All remaining shipments from the supplier were canceled pending further investigation. Staff members Marshall Brown and Susan Rivers traveled to Virginia in early June to collect trout for further testing and to gather information. The Casta Line owner was helpful and provided information on the purchased trout and on his operations. Samples of adult and fingerling rainbow trout were collected and were submitted to the laboratory for testing. Investigation of the event is continuing. Staff members were reminded that shipments of any species of fish can be turned down if staff observes what appear to be health problems that exceed the scope of transport stress.
- Inland staff Susan Rivers and Brian Richardson met with Oxford staff Steve Early, Chris Dungan and Joe Marcino regarding any fish health assistance that could be provided by the Oxford facility. Money, personnel and lab space all present problems in today's economy. Susan and Brian were looking into all options for fish health testing, including a new contract with the Lamar Laboratory.
- Inland Fisheries staff will receive fish health training in August to teach them how to prepare specimens to ship to the lab. Susan Rivers ordered materials to prepare fish health kits to be stationed at each field office and fish hatchery. Joe Marcino from the Cooperative Oxford Lab (COL) is a certified fish pathologist through the American Fisheries Society and he will be teaching the classes. Joe suggested the materials for the kits and will address them when he teaches each group. There will be five sessions Albert Powell Hatchery, Bear Creek Hatchery, Manning Hatchery, and Unicorn Hatchery. A session was added for Matapeake Office to cover fish health issues regarding estuarine species.
- Western Region II conducted electrofishing surveys at three sites on the Monocacy River and four sites on the Potomac River to collect representative fish species to assess general fish health based on observations of external abnormalities. Though not overly scientific, the collections provide a method of quantifying the extent of abnormalities such as lesions, healed lesions, parasites, fin erosion, and gill erosion. Many of these abnormalities have been routinely observed throughout the Potomac watershed and the

common causes have been identified. The incidence of lesions on sucker species (the most common species to show lesions), usually ranges between 15 and 30% at this time of year, but was much less this spring, mostly less than 10%. No lesions were observed on smallmouth bass at any site.

Staff Efficiency and Training

- Central Region inland fisheries staff attended Maryland Biological Stream Survey (MBSS) training at the Harford Glen Environmental Education Center in Harford County. Staff enjoyed power point seminars on fishes, herpetofauna, freshwater mussels and crayfish.
- Inland staff John Mullican, Mark Staley, and Joe Love attended a week-long class at USFWS National Conservation Training Center (NCTC) in Shepherdstown, WV titled "Fish Population Dynamics and Assessment". The class covered parameter estimation using least squares, mortality, growth and catch curves, exploitation rates and yield, and trend analysis and how to model these analysis using Excel spreadsheets.
- Western Region II biologists Mark Toms and John Mullican attended/participated in a demonstration of The Nature Conservancy's "rain maker" on a gravel road (Wallizer Rd) in Green Ridge State Forest. The "rain maker" is a device constructed of PVC piping that mimics a fairly gentle rain event on 100yds of gravel road as a method of quantifying the amount of sediment that leaves the roadway during these events. The device and methodology was developed by the Center for Dirt and Gravel Roads Studies in PA. The Center can provide an inventory of existing gravel roads and identify problem areas for sediment transport and rank according to severity. Fisheries is interested in having the Center survey the ~10 miles of gravel roads in the Frederick City Watershed because of the current impact these roads are having on the upper Fishing Creek watershed, which supports a strong population of brook trout

Invasive species

- Western Region II technician Josh Henesy performed maintenance on District wader wash stations and posted the felt wader ban informational signs. The informational signs located at the parking lots for the Beaver Creek Fly-Fishing-Only Area were also replaced and updated.
- Western Region staff continued to maintain Didymo wash stations throughout Garrett and Allegany Counties. Staff added three additional wader wash stations on the Savage River Tailwater. Also the staff placed "No Felts" signs at angler access areas on popular trout streams.
- Southern Region biologists have continued their work sampling blue catfish in the Potomac River to determine age-structure of the population, diet, length-weight relationships, and fecundity. Over 250 fish weighing from 1 to 65 lbs were collected during the month of May. While most fish had empty stomachs, biologists found that mollusks were the most common item found in fish from 306 610 mm total length (TL); nearly 90% of the diet of blue catfish greater than 610 mm was fish.

Fish Hatchery Production

- Western Region II staff deployed D-traps in a pond at Mount Saint Mary's College in an attempt to collect green sunfish for Cedarville Hatchery. The hatchery uses the green sunfish to produce the hybrids (bluegill x green sunfish) used in the rodeo program. Unfortunately, no green sunfish were caught. However, 70 large hybrid sunfish were collected which will be used by the program for rodeo events.
- Southern Region biologists collected broodstock for Cedarville Hatchery during May and June by. Fishes collected include largemouth bass, bluegill sunfish, and black crappie from the Potomac River, and golden shiners from the Patuxent River.

Impoundments

- Eastern Region staff assisted the City of Salisbury with vegetation problems at Schumaker's Lake. The city was advised on best management practices of aquatic herbicide use for their upcoming treatments on the lake.
- Central Region biologists stocked 15,000 1-1 ¹/₂ inch walleye fingerlings from Cedarville hatchery into Liberty Reservoir to supplement walleye reproduction naturally occurring in the reservoir.
- Accident Pond, Woodsboro Pond, and Boonsboro Pond in the Western Region II districts were treated to control nuisance aquatic vegetation and algae. All three ponds support youth fishing events and derbies.
- Western Region II staff collected a sample of largemouth bass from Greenbrier Lake to ship to the USFWS Lamar lab for routine health screening. Routine health screening is necessary before additional collections and transfers can be made. The bass population in Greenbrier Lake is characterized by very high catch rates and low relative weights. Electrofishing efforts this year will remove bass from Greenbrier and will move them to other public waters that would benefit from additional stock-size bass.
- During late-April nearly a dozen adult smallmouth bass from Triadelphia Reservoir were stocked into the Triadelphia rearing pond, which had been stocked in March with fathead minnows by Washington Suburban Sanitary Commission (WSSC) staff. The project aimed to provide smallmouth bass fry with refugia from predation in order to improve juvenile recruitment. On 15 June 2011 Southern Region biologists checked for reproductive success of the smallmouth bass broodstock. Juvenile smallmouth bass were abundant and over 30 individuals were captured in a 10-m seine. Fish appeared healthy and averaged 63.7 mm TL (SD= 3.9 mm), and prey was abundant. The juveniles will remain in the rearing pond until late-summer.
- Southern Region biologists sampled numerous ponds using electrofishing and other gears. Sampled locations include Governors Bridge Pond and Kentlands Pond, two Prince George's County impoundments managed by the Maryland National Capitol Parks and Planning Commission.
- Since Calvert Cliffs Pond is slated to be drained to make necessary repairs, Southern Region biologists removed dozens of largemouth bass, bluegill sunfish, redear sunfish, and other fishes and stocked them to various locations in the region, including Cedarville Pond, Governors Bridge Pond, and the Patuxent River.
- Southern Region biologists treated Hughesville Pond to reduce algae and aquatic plants. The pond is a small but popular fishing location in Charles County. The pond experiences seasonal algae blooms and dense aquatic vegetation, which make angling difficult.

Outreach

- Stemmers Run is a popular fishing and hunting area, but was closed by the Army Corp of Engineers because of dumping and other illegal activities in 2010. It was re-opened with an agreement between Inland Fisheries and Wildlife and Heritage that maintenance/policing would be shared by both agencies; with Fisheries assuming responsibilities from February-August, and Wildlife and Heritage assuming responsibilities from September-January. The two agencies worked cooperatively to build several new metal gates on the property that will restrict access to certain areas. Installation of the gates should be completed soon.
- Eastern Regional Staff represented the Department 2 of the 3 days of the Maryland Waterman's Association Annual Rockfish Tournament.
- Western Region II biologist John Mullican prepared and presented a Power Point presentation on trout resources and management in District II to the Seneca Valley Chapter of Trout Unlimited. The presentation covered trout management schemes and long-term population data from the special regulation areas. Additional information was provided on the current status of the smallmouth bass fishery in the upper Potomac River.
- Western Region II Staff met with the proprietor of the Beaver Creek Fly Shop to discuss Fisheries' ongoing monitoring efforts, population trends, and regulations for Beaver Creek. Although not DNR regulation and not enforceable by the NRP, a landowner with stream frontage in the put-and-take area has posted signs on his property that anglers must release brown trout in an effort to protect wild fish.
- Western Region I staff Jody Johnson and Marcus Wilson gave several staff members of the MD DNR Wildlife Service an educational electrofishing boat survey of Lake Habeeb at Rocky State Park during the Wildlife Service's Annual Staff Meeting.
- Planning biologist Susan Rivers helped BOJC organizers to host an event for wounded veterans at Camp Airy ponds on Memorial Day weekend. The event was part of the Healing Waters and Wounded Warriors program in the DC area. This was touted as a Marines Helping Marine fishing Tournament. Albert Powell Hatchery provided 200 trout for the event. Fisheries provided a fishing waiver for license requirement for injured veterans and help from the hospital. The event went quite well and the weather cooperated. Soldiers from Fort Belvoir participated in the event, with assistance from BOJC members, marines from the Naval Support Facility in Thurmont, and Susan Rivers and John Mullican from Inland Fisheries. These events are scheduled to help wounded soldiers with physical and spiritual healing.

Youth Rodeos

- Western Region I staff Jon Folk, Jody Johnson, Marcus Wilson, and Kenny Wampler participated in the Hunting and Fishing Field Day held at the Midland Sportsmen's Club near Lonaconing, MD. The crew was on hand to help the kids with all aspects of fishing, from tying on hooks, using worms for bait, and helping the children unhook their fish.
- Eastern Regional Staff completed hauling and stocking of fish for the Pocomoke NRP, Eastern Neck NWR, Blackwater NWR, Salisbury and Rising Sun fishing rodeos.
- Planning staff biologist Susan Rivers and Western Region II technician Josh Henesy presented a Power Point presentation and streamside course in Aquatic Entomology basics to the boys attending the Brotherhood of the Junglecock (BOJC) event held at Camp Airy on May 13 and 14. Logistics at the Camp prevent participation of girls in the

program, and Susan was a little out of place as the only woman present. The streamside bug identification event on Saturday proved to be rather entertaining when staff found that one of the boys was ingesting bugs from the sample. This provided Susan with the perfect opportunity to teach a lesson on parasitology and she enlightened the young man on the hazards that can be found in the water, like *Giardia lamblia*. The young man contemplated the possible side effects of his actions, and no one else decided to try the delicacies in the sampler. Other than this little glitch, the boys learned about the organisms in the water and their importance as part of the aquatic ecosystem and as food items for fish species.

Children in Nature

- The 5th Grade Class at Broadford Elementary School received an educational grant to do a comparative water quality study on Broadford Lake and Deep Creek Lake. The class spent a day with Western Region I biologist Alan Klotz taking water quality measurements at various locations on both lakes. The students then looked at different land uses around each lake, and tried to determine the land use effects on water quality.
- Western Region I staff conducted a stream ecology demonstration for the students of the Swan Meadow School near Oakland, MD. The school is next to Cherry Creek, a tributary to the Youghiogheny River, and is severely degraded from agriculture and livestock in the watershed. The school would like to start a project to restore the riparian zone and stream habitat in the stream, partnering with DNR, the Garrett County Soil Conservation Service, State Highway Administration, and other non-profit conservation groups.
- Western Region I staff conducted the Aquatics portion of the Garrett County Envirothon held at 4-H Environmental Center near Bittinger, MD. Students were tested on their knowledge of fish anatomy, fish identification, benthic macroinvertebrates, and estuaries. Northern Garrett High School's Northern Lights Team took top honors, and competed in the Maryland Sate Envirothon held at St. Mary's College.
- Western Region I staff Alan Klotz and Kenny Wampler conducted a stream ecology demonstration to the entire 6th grade class of Northern Garrett Middle School as part of the school's "Wilderness Week." Wilderness Week allows all the students to have a connection with nature including an aquatic, wildlife, forestry components as well as outdoor recreation. The students participated in an electrofishing and aquatic macroinvertebrate sampling of Cove Run, a brook trout stream in the Youghiogheny River Watershed.
- Western Region I staff Kenny Wampler and Alan Klotz conducted a "Learn to Fish" clinic at Accident Elementary School's annual Enrichment Day. Children were taught how to effectively cast spinning rod and fly rods, as well as learn about the different types of stream organisms that fish feed on.
- May and June have been busy months for Albert Powell Hatchery. Many school and handicapped groups visited the hatchery for tours and to learn about aquaculture. Some of the groups were part of the "Trout in the Classroom" program. These students raise trout for three to five months and the stock the fingerlings in local streams designated by the local fishery manager. All staff members housed at APH assisted with this effort.

Jennings Randolph Lake Hydroelectric Plant Application

The following text is the summary of comments from staff personnel from WV DNR, MD DNR, and Versar Inc regarding the proposed Hydroelectric Plant at Jennings Randolph Lake.

- Project proposal construct an approximate 14-megawatt capacity hydroelectric facility at Jennings Randolph Reservoir Dam on the North Branch Potomac River.
- Project would consist of a new multi-level intake, a 1,400-foot flow delivery tunnel around the dam and through rock on the left descending dam abutment, a 1,100-foot penstock, and a powerhouse discharging into North Branch Potomac River approximately 650 feet downstream of the USACE outlet works.
- The intake structure, intake tunnel, and a part of the penstock would be located in MD. The powerhouse and the lower section of the penstock would be located in WV.
- MD DNR, WV DNR, and Versar Inc agreed to require the power company to meet the following conditions for the application:
 - Monitor water quality at the power plant intakes, tailrace, upstream of the tailrace, and downstream of the tailrace.
 - Prepare a Water Quality Maintenance and Operation Plan outlining steps that would be taken if any of the water quality parameters are not met.
 - Develop a fish monitoring plan for the tailwaters and reservoir that would include, at a minimum, the procedures and reporting requirements for developer to monitor the fishery.
 - The project will require a Sedimentation and Erosion Control Plan and a Recreational Access Enhancement Plan.
 - Maintain the existing flow regime, established by the Corps of Engineers, including minimum flows and reservoir elevations.
 - In coordination with state resource agencies, the developer will develop a plan for the installation of a penstock valve to allow for the development of potential water dependent projects.
 - The developer will design, monitor and maintain intake velocities not to exceed 1.5 fps to reduce the occurrence of entrainment and/or impingement of fish species.
 - The developer will develop a habitat improvement project in a river or stream reach that is in proximity to the project area. A technical committee composed of representatives from the developer, USACE, WV DNR and MDNR that will be tasked with finding an appropriate habitat improvement site.
 - The developer will prepare and implement a plan to ensure that stream flow is measured and available to the public in real-time.

Savage River Reservoir Fish Restoration

• Fingerling stocking of gamefish species continued for the second year after the draining of the reservoir. Western Region I staff Jon Folk, Kenny Wampler, and Marcus Wilson traveled to Manning Hatchery and received 20,000 walleye fingerlings and 26,600 largemouth bass fingerlings to be stocked into the reservoir. The crew also placed about 50 Christmas tree fish habitat structures in the upper portion of the lake. Adult largemouth bass and bluegills were observed in the reservoir. After a whitewater release was conducted in early June, staff documented several de-watered bluegill spawning beds.

Deep Creek Lake Fish Kill

• Western Region I biologist Alan Klotz received and investigated d a fish kill report on Deep Creek Lake on 6/9/11. The report indicated 50 dead fish in the mid-lake region from Bills Outdoor Center to the Will-O-Wisp along Rt. 219 on 6/6/11. He observed dead fish (10 large Bluegills) in the north lake region near McHenry; mid-lake region near Bill's Outdoor Center (11 Bluegills, a few Yellow Perch, Rock Bass, and a Smallmouth Bass), and southern region near Beckman's (15 Bluegills, and a few Yellow Perch, Smallmouth Bass, and Rock Bass). If the report had been made on the day of the event, staff would have had a better chance on determining the cause. However, subsequent water sampling by the Resource Assessment Service showed slightly elevated pH levels which may have been cause by an algal bloom and could have been a contributing factor.

North Branch Potomac River Boat Ramps

• Engineering and Construction Service's Max Milaninia and Harvey Bryant provided the following update: there are joint permits (wetland and USACE) for both boat ramps - Black Oak and McCoole. The Black Oak project doesn't need sediment and erosion approval, so it is ready for construction, and will be conducted during low water period in August 2011. However, McCoole is a much larger project because it has more than 100 cubic yards fill or excavation and 5,000 square feet disturbance, therefore DNR will need to apply for sediment and erosion approval & storm water management waiver. MDE would take about 6 months to approve a sediment and erosion application. At that time construction can begin for the McCoole ramp. The plan is to do this project in-house. Staff will work with Ron Rafter to come up with an estimate and will ask Della Moore to secure the funding.