

**Chesapeake Bay Program Committee, Subcommittee, and Work Group Activities for
STAC**

(Assembled through emails of 6/06/05)

Communications Workgroup Meeting (March 8, 2005)

The U.S. Fish and Wildlife Service is looking to reprint some 30,000 copies of the 84 page guide called “Native Plants for Wildlife and Conservation Landscaping: Chesapeake Bay Watershed” with 420 native plant descriptions, color photographs, and cultural/growing/habitat information on individual species. The document can be viewed on the newly upgraded Bayscapes website at: <http://chesapeakebay.fws.gov/bayscapes.htm>

A “Who’s Who” in the Chesapeake Bay Program 2005 edition will be reprinted as well as a CD-ROM format. To place an order for a hardcopy or a CD, please contact Shelby Laubhan at slaubhan@chesapeakebay.net

The Chesapeake Bay will be a feature article in the June/July issue of the National Geographic. An additional article will highlight John Smith’s voyage into the Bay.

Shannon Sprague (NOAA) discussed the Education’s Workgroup’s ongoing effort to evaluate the Meaningful Watershed Environmental Experiences (MWEE) commitment. The purpose of the evaluation is to determine if MWEE’s are effective in improving academic achievement and instilling environmental stewardship/attitudes, and to create an evaluation tool that can be used easily by future MWEE providers. It focuses primarily on the quality of experiences being provided rather the quantity. The evaluation is being conducted through observation and surveys, including reviewing students work and using on-line questionnaires. Initial report will be available in the fall 2005 with the final report due out in fall 2006.

The 2005 Education Summit is to be held October 18-19 in Lancaster, PA. To learn more about it, please check out:

http://www.chesapeakebay.net/pubs/calendar/CESC_03-08-05_Handout_4_5647.pdf

Betsy Kulle (Ocean Race Chesapeake) presented the concept for the Volvo Ocean Race (formerly known as the Whitbread Races) Education Program associated with the 2005-2006 race. It is a sail boat race that begins in Spain on November 5th, sails around the world, and ends in Sweden. Baltimore’s Inner Harbor is the main US stop-over, and an in-port race will take place in the Bay on May 7th. A large education program will be created based on the race with funding provided through NOAA. It will be primarily web-based with teachers receiving packets to assist them and students will be challenged to calculate the Chesapeake Bay leg and the classes that get closest to the actual finish time will win a trip to Baltimore to meet the race crew. For more information, please check out the following website at:

<http://www.VolvoOceanRace.org>

Bob Campbell (NPS, CBPO, SESC Chair) presented an update on the ongoing environmental indicators redesign initiative by a joint taskforce from the MASC and CESC. At the April 21st Implementation Meeting, this was presented as the “Communicating the State of the Bay and the

State of the Bay Restoration”. The desired outcomes were the following: Adoption of the overall communications strategy and approval of the communications products schedule; Adoption of the proposed framework for structuring and organizing Bay Program indicators; and agreement that the timeliness of updating and communicating with our indicators is a priority with the Bay Program partners and that the Information Management Subcommittee should take the lead on identifying and determining how the barriers that obstruct more timely data submission and reporting.

In an effort to expand the way the Bay Program updates the public on the health of the Bay, a new e-newsletter will begin in May. A single monthly theme will be highlighted with related stories that focus on a number of categories of interest including: monitoring Bay health, Bay restoration and stressors, Bay Journal article of the month, critter of the month, gateways site of the month, and Bay friendly tip of the month. The e-newsletter has a strong relationship to the indicators effort. It will serve as an important tool for the various subcommittees to get their stories out to the interested public.

Education Workgroup Meeting (April 6, 2005)

Shannon Sprague (NOAA Bay Office) discussed the Education Summit’s target audience for attendance. School district “teams” of administrators (Superintendents, Principals, and Science Coordinators) and teachers, as well as Environmental Educators and MWEE policy leaders from the jurisdictions will be the primary audience for the Summit. The Summit’s plenary sessions will focus on topics such as the importance of environmental education to academic achievement and the new Bay Program Education website.

Shannon outlined the drivers behind developing a tracking report for distribution and presentation at the Education Summit. This is needed because the C2K targeted 2005 as a goal. The Summit provides an opportunity to report the Workgroup’s progress towards their keystone commitment. Current tracking in VA consists of sending out surveys that address MWEE’s to superintendents, MD has been collecting data by grade level for each county, PA is distributing questionnaires to superintendents, and DC is open to guidance in this area.

Shelby Laubhan (CRC fellow) presented an overview of the on-going development of the new Bay Program Education website. The plan is to launch it in mid-October, just prior to the Education Summit. It’s main goals are to provide Bay related curriculum and resources to educators and to educate the academic community on the MWEE (which is a C2K keystone commitment). The site will be database driven and will feature four main features: homepage, lesson plans, field studies, and professional development.

Shelby also introduced the “Water Game”, a board game developed by Green Games (nonprofit) with the mission to develop and distribute a set of entertaining games that will educate and inspire children and adults to play an active role in saving the Earth’s fragile environment. If anyone would like to order, or ask any questions about this educational game, please contact Shelby at slaubhan@chesapeakebay.net

Tidal Monitoring and Analysis Workgroup Meeting (April 7, 2005)

Michael Williams (UMCES CBPO) presented the status of the indicator forecast for SAV. There was a meeting held at VIMS to discuss this indicator and it was decided that it would be done by community type since SAV corresponds to different salinity regimes. The forecast which was just released by the Bay Program will include the following: distribution of SAV in the Bay by community type, a conceptual diagram indicating the primary drivers regulating SAV growth, a table quantifying the extent of SAV in each zone from the previous year with forecasts of added or reduced SAV abundance for the current year, and a map of zonal distribution of SAV with drill down features for individual tributaries and stations.

Dave Jasinski (UMCES CBPO) presented the current tracking for the dissolved oxygen summer forecast. He reported that the impact that tropical storms Frances and Ivan had on the Bay in September 2004 included increased rainfall, which decreased surface salinity at the Bay Bridge to 0.3 psu. The DO values in late August of last year were similar to other years. When the hurricanes came through last September, the freshwater inputs helped mix the water column, which in turn oxygenated the bottom waters. The DO values for September 2004 resembled surface concentrations. To view Dave's presentation, please go to:

<http://www.chesapeakebay.net/tmaw.htm>

Chris Heyer (MD DNR) reported on the proposal to coordinate the intensive shallow water assessments of the tidal fresh, meso- and oligohaline portions of the Potomac River. A meeting was held on March 28th at the Metropolitan Washington Council of Governments (MWCOG) among various Bay stakeholders to discuss current Potomac River monitoring. It was determined that a great deal of monitoring is ongoing but these efforts are disjointed at the present time. Estimates for water quality mapping indicates that it would take approximately 8.5 days times 8 work hours to sample the entire Potomac. This is not considering travel time, weather, or other unforeseeable problems. MD DNR is planning to pursue possible funding from EPA's REMAP as well as other funding sources to support this sampling effort.

Nita Sylvester (EPA CBPO) presented an overview of the indicator redesign workshop, the purpose being to make the present maps and figures more consistent and easier to interpret. Some of the changes made include; showing the status and trends timeframe in the title, adding the analysis window/period, inset map of salinity zones, north arrow for scale, border between MD and VA, different color scheme chosen to show better in black and white, and diamond symbols in place of arrows. Nita's presentation can be viewed at:

<http://www.chesapeakebay.net/tmaw.htm>

Toxics Subcommittee Meeting (April 14, 2005)

The fish tissue survey report is completed and available on the web at:

http://www.cmiweb.org/human/CBP_fishadvisoary04.html

This project was funded by the Chesapeake Bay Program, and consisted of 8 weeks of angler interviews in 3 regions of concern around the Bay to identify populations at risk for consuming contaminated recreationally caught fish. The areas of concern were Baltimore (Baltimore

Harbor, Patapsco and Back Rivers), Washington DC (Anacostia and Potomac Rivers), and tidewater Virginia (Elizabeth and lower James Rivers).

The US EPA and MDE 2005 National Forum on Contaminants in Fish will be held in Baltimore from September 18-21, 2005. This annual event is held to bring together public health and environmental professionals from states, tribes, and other interested groups to discuss the many issues related to contaminants in fish. The forum is open to the public. For program information, please contact Jeffrey Bigler at bigler.jeff@epa.gov or at the following website: <http://epa.gov/waterscience/fish/forum/2005/index.htm>

The Bay Journal will be featuring an article called “Despite advisories, study finds many still eating tainted fish” in their May issue and can be found at the following: <http://www.bayjournal.com/article.cfm?article=2528>

A two day Characterization Workgroup planning meeting will be held on April 18th and 19th and will report back to this subcommittee at their next meeting.

On May 10th the Chesapeake Bay Voluntary Environmental Programs Conference will be held in Annapolis, it is sponsored by the Businesses for the Bay. It is intended for VEP managers to network and improve their programs.

A Toxics of Concern List STAC workshop will be held to review the product sometime in July.

MD is conducting a pesticide use survey report that will be generated sometime next year. It is a voluntary survey broken down by county to be used in conjunction with ground and surface monitoring programs to help develop pesticide management plans.

Bill Wehrum and Jason Burnett (EPA Region 3 Office) presented an update on Mercury Air Regulations, information on the Clean Air Mercury Rule (CAMR). Their powerpoint presentation can be viewed at:

<http://www.chesapeakebay.net/calendar.cfm?EventDetails=5702&DefaultView=2>

Implementation Committee Meeting (April 21, 2005)

The IC adopted the adoption statements associated with the Communicating the State of the Bay and the State of the Bay Restoration presentation with caveats by the CESC and NSC. EPA headquarters has agreed to sponsor a high level meeting in September for federal agencies to improve federal and strategic planning as part of the Executive Directive 04-2. The Nutrient Subcommittee will return to the IC in June with the compilation of the three sector meetings in order to prepare for presentation to the PSC.

Diana Esher (EPA) presented an update on the GAO audit. There has been a slight change in the scope of the questions being asked:

From: How is progress in restoring the Bay being measured and reported?

To: To what extent has the Bay Program established appropriate measures for assessing restoration progress?

From: How effective has the Bay Program been in evaluating and reporting actual progress made?

To: To what extent do the reporting mechanisms currently being used by the Bay Program provide a clear and accurate status of the Bay's health?

From: How much has been spent on restoration and for what purposes?

To: How much funding has been provided for the restoration of the bay for fiscal years 1995 through 2004 and for what purposes?

From: How is the restoration effort being coordinated and managed?

To: How effectively is the restoration effort being coordinated and managed?

Forestry Workgroup Meeting (April 25, 2005)

Al Todd (Forest Service) described the Forestry for the Bay program, handout can be viewed at: <http://www.chesapeakebay.net/calendar.cfm?EventDetails=5822&DefaultView=2>

This is a voluntary landowner program that raises awareness about the value of forests in sustaining the health of the Bay and fosters management practices that maintain or improve forest health and function. This idea is a partnership between Alliance for the Chesapeake Bay, US Forest Service, and others. The focus will be on small forest landowners encouraging them to create a stewardship plan. The program's intent is to educate and provide incentives (recognition) to forest landowners to be good stewards. There will be a web-based self-guided planning and certification system.

Sally Claggett (USFS CBPO) discussed the keystone commitment information that she presented at the April 21st Implementation Committee and the George Mason Phase 2 study. Her powerpoint presentation to the IC can be viewed at:

<http://www.chesapeakebay.net/calendar.cfm?EventDetails=5508&DefaultView=2>

Overview of her presentation includes the following; benefit of trees in the Bay watershed, the amount of forest loss, forest are important for water quality besides for buffer zones, Directive 03-01, tracking challenges, Penn State study, George Mason Study Phase 2, and forest conservation in addition to restoration efforts in the Bay watershed.

Peter Claggett (USGS CBPO) discussed the tracking issues associated with the riparian forest buffers in the Bay watershed. In order to track net gain, we need net loss data. Existing data is not high enough resolution to solve this problem. Landsat data issues center around classification. Specifically, deciduous forest and woody wetland versus deciduous forest and urban forest. Confusion is caused by the classification technique and image quality. Proposed solution is sampling design with high-resolution imagery and fixed sampling site over many years. How should categories be classified? As watershed, stream order, eco-region or geophysical region. A common design for urban sprawl, wetlands, and forest buffers should be established. Can we stratify categories by each tributary team basin? How should the PSU study be used because it overestimates forests in the watershed?

Reggie Parrish (EPA, Urban Storm water Workgroup Coordinator) and Norm Goulet (NOVA, Urban Storm water Workgroup Chair) discussed the Urban Storm water and Forestry Workgroup Work planning. They gave an overview on the USMWG background based

upon the Directive 04-2 for meeting the nutrient and sediment reduction goals. The discussion revolved around the need for a definitive definition for riparian forest buffers and urban tree canopy for this partnership to work. The goal is to draft a strategic plan that addresses urban forestry issues. How can we incorporate urban forestry into existing storm water regulatory programs? A key point to consider is that buffers are not as effective in the urban environment when compared to the agricultural and suburban environment. Next step may be to organize an Urban Watershed Forestry Summit spring 2006 that will train local governments on the Urban Tree Canopy Guidelines and/or that will provide examples of preventative measures that work together with storm water regulations.

Tributary Strategy Workgroup Meeting (May 02, 2005)

Jeff Sweeney (UMD CBPO) gave an update on the Phase 5 model. The following assumptions for BMP implementations:

2003 is the best tracking year and is the most accurate.

All BMP's will start in 1985 except Nutrient Management Plans (1992).

For agriculture, any BMP's that involve land use change are already part of the new landuse database.

Where there are significant increases or decreases from year to year, what do states want the CBPO to do?

Nutrient management implementations, conservation plans, nutrient management implementation plans, and urban storm water implementation.

There will be several calibrations between now and 2007.

Rob Burgholzer (UMD CBPO) is working on the new AgCensus data and methodology change led to a 5-7% increase in livestock populations. He is also addressing the management of agricultural waste with effects of phytase and manure being incorporated. Modeling nutrient management lands separately and expanded application timing of fertilizers. Will be trying to retrieve soil tests for phosphorus applications, if not assuming application rate categories. The Nutrient Management Handbook ranks application categories by low, medium, high, and very high phosphorus levels. Using medium rate since it assumes an average rate of application. PSU is looking at the P index and what percentage of lands fall into each category. Reworking crop yields based on weighted soils information, crops, and university recommendation.

BMP Adjustment Recommendations by Nutrient Subcommittee

List of new BMP's:

Ammonia (poultry/swine)

- Does the TSWG agree that a local ammonia deposition should be included in the calibration? Yes, if the TSWG has the numbers used for animals that is going into the model.

Estimating load (pre-BMP condition)

- Deal with dairy, include ammonia from dairy in calibration.

Use new ammonia BMP's

- Wait for final Ag Nutrient Reduction Work Group recommendation.

Horse paddock management

- Rob will provide the number of horse paddock acres and number of operations by county. Beth Horsey will give him the UMD survey for central MD. The TSWG decided to give information to representatives and then make decision.

Continuous no-till

- The TSWG agreed with the caveat that RUSLE 2 may give different numbers and that nitrogen leaching and soluble phosphorus offset impact must be determined.

Precision agriculture

- Agree with assumptions and methodology, approve use in Phase5.

Precision feeding (dairy/beef)

- BMP on hold pending Ag Nutrient Reduction Work Group recommendation.

Mortality Composters

- BMP on hold pending outcome of new BMP RFP recommendations.

Stream bank fencing

- It only looks at how animals affect stream by keeping them out.
- States report acres except for VA who reports feet of stream bank fencing.
- Beth Horsey will provide MD linear feet data to Russ Mader.
- Proposed that jurisdictions give historical stream fencing in linear feet used to calculate acreage. This landuse will referred to as degraded stream corridor.

Stream restoration (agriculture)

- What is non-urban restoration?
- All jurisdictions should provide linear feet and location and the nutrient staff will determine loads (land conversion to hay without nutrients).

BMP Adjustments:

Default values

- For maximum implementation levels use 90% by county.

Literature – O and M adjustments

- Efficiency slightly less than perfect, 5% field level and 5% O and M.
- VA draft technical document recommends 10% for field levels and 10% for O and M.
- TSWG decision: Minimum of 5% for now, but will consider 10%.

Severe weather adjustments

- Would not apply to all urban BMP's.
- USWG minutes breakout BMP efficiencies and O and M adjustments from urban BMP's.
- Adjustments would only apply to the duration of the storm.
- Most BMP's are designed for 10 year storm events.
- TSWG decision: Everyone is comfortable with graded levels. Pending further discussion, use proposed adjustments.

Planned vs. Implemented adjustments

Soil and Water Conservation Plans

- MD is only reporting 85% of its plans.
- Jurisdictions need to provide documentation and methodology for incorporation into CBP documentation.
- TSWG decision: No consensus because each state has an individual way of reporting its plans to the Bay Program. Go forward without agreement.

BMP loss adjustments

Agricultural land conversions

- TSWG decision: On hold for now, will not go forward.

Useful life

- TSWG decision: Agree that there should be a useful life adjustment at 1.5 times the design life.

Seasonality adjustments

- Apply cover crop efficiency during months it is used, October-March early, November-March late.

Other Nutrient Issues

Nutrient applications using the N-P manure link

- TSWG agrees to make the link.

Biosolids

- Va submits data by location.
- In reality, biosolids and manure are both applied in the same year to the same acreage.