



John S. Truhan Consulting Engineers, Inc.

**Metedeconk River Watershed Protection & Restoration Plan**  
Meeting Minutes  
Stakeholder Advisory Committee Meeting 5: April 26, 2012

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The fifth Metedeconk River Watershed Protection & Restoration Plan Stakeholder Advisory Committee was held at Jackson Township’s Municipal Building on April 26, 2012 between 1:00 and 4:00 PM. A copy of the meeting agenda and sign-in sheet is attached.

Robert Karl, Project Manager for BTMUA, opened the meeting and thanked Jackson Township for hosting and providing the venue. Following introductions by the attendees, Mr. Karl gave a brief project status update. He indicated that the purpose of the meeting was to present the draft Metedeconk River Watershed Protection and Restoration Plan and to discuss and prioritize projects for implementation and the Task 9 conceptual designs. The draft Plan has been posted to the project eRoom and is available for review and comment. If there is anything anyone feels is missing, this will likely be the last opportunity to have it addressed. Mr. Karl stressed that although BTMUA is managing the project, the Plan does not belong to any one group or agency, but rather it belongs to all of the Stakeholders within the watershed. As such, anyone can/should implement elements of the plan. Once the plan is approved by NJDEP, additional grant funding opportunities will become available for implementation projects, such as 319(h) grants.

Dan O’Rourke, Project Manager for CDM Smith, proceeded into a discussion of the activities conducted since the previous Stakeholder Advisory Committee meeting held on November 29, 2011. Since that time, a number of activities have been conducted:

- Finalization of Task 5, Management Strategies: An online survey was issued for the Stakeholders to rank the relative importance of the eight BMP functions that were developed as part of the Management Strategies memorandum. The results of the online survey were processed and are as follows:

BMP Function	Average Weight	Min	Max
Improve Water Quality	24	10	50
Improve Baseflow	16	0	35
Improve Habitat	13	3	40
Cost	13	0	40
Reduce Flow	12	5	40
Promote Water Conservation & Reuse	12	5	35
Potential for Public Involvement	9	0	20

Projects that promote water quality improvement and enhance infiltration reflect the priorities of the Stakeholders. However, although source control projects offer no benefit to enhancing infiltration, these projects are key to the implementation of the fecal coliform TMDLs. Since implementing the TMDLs is a priority for the Plan, those strategies need to be prioritized. The project priority list that resulted from the technical analysis and the results of the online survey should serve as a guideline only for future project planning. Additional factors will need to be considered when project sites are evaluated such as available space, cost, permitting requirements, etc.

- Site visits: Site visits to 16 different sites were conducted during late December 2011. The purpose of the site visits was to evaluate potential projects at 16 of the priority visual assessment sites. The project team consisted of Rob Karl (BTMUA), Dan O'Rourke (CDM Smith), Eileen Althouse (CDM Smith), Joe Malison (John S. Truhan Engineers, Inc.) and Matt Condiotti (CDM Smith). The sites were chosen from priority sites listed in the Task 3 Technical Analysis Report. In addition, downtown Lakewood was visited as a possible site for urban green stormwater infrastructure. Mr. Jeffrey Sharp from the Howell Township Board of Education was acknowledged by the project team for his assistance with the site visit to the Newbury School, where he provided extensive background on the school and historical drainage issues. In addition, Mr. Justin Flanbaum from Lakewood MUA was acknowledged for giving the project team a walking tour of downtown Lakewood.
- Education and Outreach Subcommittee: An education and outreach subcommittee was formed and the subcommittee held a workshop in January 2012. The purpose of the workshop was to develop ideas for the education and outreach program. The workshop was very productive and served as the foundation for the education and outreach program contained within the Plan.

Mr. O'Rourke then proceeded to discuss the draft Watershed Protection and Restoration Plan, using a PowerPoint presentation. The Plan follows the guidance provided in the USEPA's *Handbook for Developing Watershed Plans to Restore and Protect Our Waters*. The Plan serves as a culmination of all work to date, but has additional analyses conducted as well. All analyses were conducted on a HUC14 basis. The Plan is divided into 7 sections:

- Section 1 – Introduction: general introduction to the Metedeconk River watershed and some of the issues facing the watershed. A brief overview of recent regulations (Phase II Stormwater Rules, Fertilizer Law, etc) is also discussed. The project goals and objectives are also presented.
- Section 2 – Watershed Characterization: Much of this section originated from the Task 3 Report, although some additional and updated information is included. Section 2 primarily focuses on flow characteristics of the river and existing land use/land cover (2007). Land use and zoning data were used to generate a "developable land" GIS coverage. It was noted, however, that although the developable land represents a good first approximation, it is land use based. Therefore, open portions of land that are already considered residential or commercial are included. While it may very well be that these areas can be developed within existing zoning

regulations (housing addition or commercial expansion), the developable land is not confined to whole parcels of land which are currently not developed.

- Section 3 – Watershed Conditions: This section primarily addresses water quality and identified impairments (TMDLs, 2010 303(d) List, others) throughout the watershed. Pollutant sources and loading estimates were also calculated for total nitrogen (TN), total phosphorus (TP) and total suspended solids (TSS). Loading estimates published within the existing TMDLs were used for pathogens. Loading estimates for TN, TP and TSS were calculated based on unit area loads published in the NJDEP BMP Manual. While calculated TN is much higher than recent estimates published by the USGS for total nitrogen discharging to the Barnegat Bay from the Metedeconk River, the unit area load calculations represent surface loads and therefore do not account for denitrification through plant uptake and discharge through the hyporheic zone. Comparing the two estimates, approximately 48% of nitrogen is removed through these processes, which is within reason.
- Section 4 – Management Strategies: The Task 5 memorandum, *Management Strategies*, represents a “tool-box” that can be utilized for designing implementation projects throughout the watershed. The management strategies within Task 5 are referenced within this section. There has been a great deal of work that has been conducted in the past and should be utilized to the fullest extent possible to help select areas for implementation projects (e.g., Rutgers/Jacques Cousteau NERR SWMPT tool, land identified by UMASS/TPL study). Load reductions were identified for TN, TP, TSS and pathogens. For pathogens and TP, the percent reduction published in the TMDLs was used. For TN, the corresponding annual unit area load coefficients published in the NJDEP BMP Manual for forest, water and wetlands (3 lb-TN/acre) were used as a target to represent pre-development conditions. Alternatively, the target load for the Chesapeake Watershed was offered (4.5 lb-TN/acre) as a more appropriate target due to the extensive development within the Metedeconk River watershed. For TSS, the pre-development load was calculated using the forest, water, wetlands load of 40 lb-TSS/acre per year). Target load reductions from urban and agricultural land use are 49%, 85% and 73% for TN (using the Chesapeake Watershed target), TP and TSS, respectively. Site specific strategies are offered on a site and HUC14 basis.

Five primary mechanisms for selection and application of management strategies were recommended:

- Retrofit existing stormwater detention basins
  - Install structural BMP at existing direct outfalls
  - Source control and flow path BMPs (rain gardens, etc)
  - Resource conservation and protection
  - Development of ordinances to require LID development techniques on all new and redevelopment within the watershed
- Section 5 – Implementation Program: This section includes recommended strategies for the identified impairments throughout the watershed. In addition, the education and outreach program is introduced and discussed in more detail as an appendix. Recommended monitoring is also given as well as an implementation schedule and tracking mechanism (implementation matrices). The Stakeholders were asked to provide input on the use and format of these

matrices. Finally, a fiscal analysis is included which includes the various funding sources and tools for acquiring capital funds.

- Section 6 – Summary of Recommendations: Although recommendations are offered throughout Sections 2 through 5, the purpose of Section 6 is to organize the recommendations by goal and objective and serve as a “quick reference”. The project team requested Stakeholder input regarding the specific format of this section as well as any additional recommendations which may have been inadvertently not included in the Plan.
- Section 7 – References.

Following an overview of the draft Plan, Mr. O’Rourke proceeded to discuss the conceptual designs for Task 9. A brief overview of 11 of the priority sites (a refined list from the site visits) was given. In addition to the 11 project sites, the development of a model low impact development (LID) ordinance for the Metedeconk watershed was also included as a potential project for Task 9. Following the presentation, the Stakeholders were asked to fill out a sheet ranking the various project sites.

The Stakeholder Advisory Committee mentioned that one of the sites, the Brick Park and Ride (TR1-2) may be incorporated into a large project involving a Parkway interchange at Exit 91. The team will take this under advisement moving forward and perhaps schedule a meeting with the design team for that project. Another comment was made that various transportation departments may be funding sources to particular management strategies, primarily stormwater bump-outs, as they offer traffic thinning benefits and can help pedestrian safety. Jackson Township recommended that the plan include a recommendation that its tree saving ordinance be adopted by the other watershed municipalities, as it has been very effective and tested/upheld by the courts.

The meeting was closed with a reminder to review the draft Plan and provide any comments to R. Karl and/or D. O’Rourke.

A copy of the PowerPoint presentation has been posted to the eRoom.

cc: Stakeholder Advisory Committee Distribution

***Metedeconk River Watershed Protection & Restoration Plan***

**Stakeholder Advisory Committee Meeting**

**Jackson Township Municipal Building**

**April 26, 2012**

**1:00 pm – 4:00 pm**

**Agenda**

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|-------------------|--|
| 1:00 pm – 1:15 pm | Introductions  |
| 1:15 pm – 1:45 pm | Summary of work completed since the November SAC meeting                   |
| 1:45 pm – 2:45 pm | Overview of draft Metedeconk River Watershed Protection & Restoration Plan |
| 2:45 pm – 3:15 pm | Priority projects for implementation                                       |
| 3:15 pm – 3:45 pm | Discussion   |
| 3:45 pm – 4:00 pm | Wrap up and next steps   |

**Metedeconk River Watershed Protection & Restoration Plan  
Stakeholder Advisory Committee Meeting  
April 26, 2012**

**SIGN-IN SHEET**

	Name	Affiliation	Telephone	Email
1	Michael J Hill	FSCD	732-653-5200	
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10	R. KARL	BTMUA		
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12	D. O'ROURKE	CDM SMITH		
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**SIGN-IN SHEET**

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