

# Three Mile Creek Watershed Management Plan

---

## Appendix G – Regulatory Review

### Regulatory Drivers and Constraints

The regulatory framework for TMC includes several layers and local, state and federal agencies. There are two primary levels of regulation which will impact the restoration of the TMC watershed: one governing the current activities in the watershed and driving the restoration effort; and a second related to implementing specific projects such as stream restoration and stormwater retrofit.

### Watershed Restoration Drivers

The primary regulatory drivers governing the current activities in the watershed and driving the restoration effort include:

- ADEM NPDES MS4 permit governing stormwater discharges for the entire watershed (several hundred outfalls discharge to surface waters); and upcoming changes to the NPDES MS4 program from USEPA expected to be final in 2014;
- TMDLs for TMC, TSB, and CEN; ADEM state groundwater and surface water quality standards;
- Groundwater concerns associated with the Hickory Street Landfill and Mobile Coal Gasification Plant; and
- Objectives and plans included in the Comprehensive Conservation and Management Plan (CCMP) developed by the Mobile Bay National Estuary Program (MBNEP) and approved in 2002.

There are two additional minor regulatory drivers including NPDES Industrial General Permits for specific facilities, and NPDES Construction General Permits for active construction sites. Although listed as minor drivers it is very important for ADEM and the City of Mobile to enforce the requirements of these NPDES permits. The City of Mobile is the local issuing authority for land disturbing permits and is therefore responsible for ensuring construction erosion and sediment controls are properly implemented and maintained.

Historically, the ADEM NPDES Wastewater Permits for two municipal wastewater treatment facility discharges, Wright Smith Jr. (12.8 MGD) and City of Prichard Carlos Morris (4.1 MGD) were primary water quality drivers in the TMC watershed. Now that both of these point source discharges are scheduled to be diverted to a different watershed, they should no longer impact TMC water quality. One issue of importance is the loss of water flows from the two facilities and how that will affect water flow and quality in the lower portion of the creek.

---

ADEM NPDES MS4 permit governing stormwater discharges for the entire watershed (several hundred outfalls discharge to surface waters); and upcoming changes to the NPDES MS4 program from USEPA expected to be final in 2014

The entire TMC watershed is within the City of Mobile's NPDES MS4 permit service area. The primary objective of the NPDES MS4 permit is to reduce the discharge of pollutants from the permitted stormwater outfalls to the surface water system to the maximum extent practicable. As mentioned above the City's NPDES MS4 permit requirements include overseeing the Construction General Permits, thereby controlling erosion and sediment transport during construction. Failure to control site erosion and sediment transport can result in substantial sediment loadings to TMC and tributaries. Nationwide, sediment erosion and transport during construction is one of the largest sources of suspended solids to our surface waters. Many other pollutants can be carried into the creek with sediment including nutrients, BOD, and metals. Under the MS4 permit the City is also responsible for completing other tasks on an annual basis such as inspecting outfalls and highly visible pollutant sources, illicit discharge identification and elimination, good housekeeping at municipal facilities, public outreach and education and reporting to ADEM on activities completed.

Upcoming changes to the NPDES MS4 program will be proposed by USEPA likely in 2014. Any changes will then need to be incorporated into ADEM's NPDES program and eventually into the City's permit at a later date. The specifics of the changes and the timing and process for making the changes is not known at this time. The changes are expected to include some requirements for including runoff volume controls to reduce the volume of runoff which leaves a newly developed site. Green Infrastructure is being promoted throughout the US to achieve runoff volume reduction. By reducing runoff volume, the corresponding runoff pollutant load is also reduced.

TMDLs for TMC, TSB, and CEN; and ADEM state groundwater and surface water quality standards; and potential future numeric nutrient criteria for surface waters

TMC is classified by the state as an Agricultural and Industrial Water Supply. The minimum dissolved oxygen (DO) concentration for this classification is 3.0 milligrams per liter (mg/L). It is important to note that this DO requirement is substantially less stringent than the typical recreational surface water DO standard of 5.0 mg/L. The state surface water fecal coliform standard for non-coastal waters with incidental water contact and recreation during June through September is a geometric mean value of 200 colonies per 100 milliliters (#/100 mL). In coastal waters, the enterococci group geometric mean shall not exceed 35 colonies/100 mL and no single sample shall be greater than 158 colonies/100 mL.

In 2006, ADEM published the Final TMDL for Organic Enrichment/Dissolved Oxygen for all three segments of TMC. ADEM

# Three Mile Creek Watershed Management Plan

---

performed modeling in conjunction with field monitoring to develop the TMDL for nitrogenous biochemical oxygen demand (NBOD) and carbonaceous biochemical oxygen demand (CBOD) for both point and non-point pollution sources. The TMDL establishes required NBOD and CBOD load reductions to improve water quality and specifically dissolved oxygen throughout the creek.

In 2009, Final TMDLs were developed by ADEM for pathogens for TSB and CEN. TMDLs are expected from ADEM this year for pathogens for TMC, and nutrients for both TSB and CEN. The state surface water quality standards to be used for nutrients are unknown at this time. Once these TMDLs are completed the required load reductions for all primary pollutants of concern in the TMC basin will be specified.

The primary pollutants of concern in TMC include: NBOD/CBOD (dissolved oxygen); nutrients; and pathogens. It is important to note that trash and organic debris which are prevalent throughout the TMC watershed typically contain NBOD/BOD, nutrients, and pathogens. Keeping trash and organic debris out of TMC will be one of the primary objectives of the Management Plan. There is a secondary concern related to industrial and wastewater compounds especially in TSB, the CEN and the lower portion of the creek. The USGS study identified many different types of wastewater compounds throughout the creek which could adversely impact aquatic life, wildlife, and the recreational opportunities.

## Groundwater concerns associated with the Hickory Street Landfill and Mobile Coal Gasification Plant

The Hickory Street Landfill Site and the Mobile Gas Site are both potential sources of pollutants to the surface water system. Minimal assessment of these sites has been completed to date. The primary concern is potential groundwater contamination. An assessment of groundwater flow and chemical characteristics is needed to determine if these sites are an important pollutant source in the watershed.

## Objectives and plans included in the Comprehensive Conservation and Management Plan (CCMP) developed by the Mobile Bay National Estuary Program (MBNEP) and approved in 2002

This DRAFT Comprehensive Conservation Management Plan (CCMP) 2013-2018 provides a first look at the many actions identified to protect our coastal way of life. Based on a science and extensive community input, this plan offers a well-rounded approach for coastal restoration and long-term environmental management. The plan is structured around six things the community values most about living on the coast: ACCESS, COASTLINES, FISH, HERITAGE, RESILIENCE, and WATER QUALITY. The actions within have been crafted to improve how we measure ecosystem health, restore the systems that support

---

its health, build community capacity to better manage our natural and cultural assets, and expand community ownership of our cherished coastal resources.

### Project Implementation Drivers

The second component of the regulatory framework relates to the permits required to construct potential stormwater BMPs or ecological restoration projects proposed in the WMP. It will be very important with each and every restoration project to meet with local, state and federal permitting entities early in the planning process to identify all required permits and project permit application requirements.

### Local Development Permits

As previously mentioned, a local Land Disturbing Permit would need to be obtained from the City of Mobile for the construction of any project which disturbs soil. To receive this permit, construction documents which include erosion and sediment controls and a stormwater report will need to be submitted and approved by the City. Depending on the type of project and the scope of work other site or building permits may be required from the City. Some types of construction work that can trigger additional permit requirements include: street or utility modifications; sidewalks; and structures. This could involve submitting construction documents to additional City departments for review and approval.

### State and Federal Permits

If project construction requires the disturbance of state/federal jurisdictional surface waters or wetlands, such as a stream restoration project, a permit will likely be required from both ADEM and the USACE. There are exceptions for very small projects and certain types of maintenance work. For smaller projects which impact only a small jurisdictional area, only a USACE Nationwide Permit will likely be required. There are 50 types of activities covered by Nationwide Permits and all specified general conditions must be met. Nationwide Permits can typically be issued within a period of months. A single project can require one or more Nationwide Permits depending on the work activities.

For projects which do not meet the requirements for a Nationwide Permit, a Section 404 Individual Permit may be required from ADEM/USACE. This joint permit application and approval process is much more comprehensive and time consuming. When a 404 permit application is submitted it will be reviewed by a wide range of agencies and must meet a public interest test. It must also be publically noticed which can open the door for permit challenges. Obtaining an Individual Permit can take a year or

# Three Mile Creek Watershed Management Plan

---

longer. Fortunately, for most stormwater BMP retrofits and stream restoration projects, only Nationwide Permits are required.

ADEM's Division 8 Coastal Program rules require that a permit be obtained for all new commercial and residential developments located wholly or partially within the coastal area which are or will be greater than five (5) acres in size and which have areas which are or could be delineated as wetlands; or are adjacent to coastal waters; or are intercepted by the coastal control line. Although not typical there may be certain types of restoration projects in the coastal area that may require an ADEM Coastal Program permit. Projects which include potential impacts to surface waters or the dredging and/or filling of wetlands may also require permits in some instances from the State Oil and Gas Board, and/or the ALDCNR-State Lands Division.

To comply with the NPDES Construction General Permit, all projects which disturb a land area of 1 acre or more will require submittal of a Construction Notice of Intent. This is typically submitted by the selected Contractor since they are responsible for erosion and sediment controls during construction. Once construction is completed the Contractor must submit a Notice of Termination.

The USACE designed and constructed the TMC widening project. Even if a specific permit is not required from USACE, which is unlikely, any proposed changes to the channel or weirs will need to be carefully coordinated with USACE. With any project of this type, care will be needed to maintain the current integrity and effectiveness of the creek for flood protection. Ideally USACE can be engaged as a partner throughout the restoration of the TMC watershed.