

## **Management Strategy Checklist for Willamette TMDL Implementation Plan Development**

Develop a short background piece to include:

- Background, Goals and Objectives – *can develop a general statement*
- Condition Assessment:
  - Setting for the city – *location, size, Departments, contacts*
  - Water quality/beneficial use concerns – *can pull from TMDL*

**Management Strategies:** The following are key management strategies that all plans should consider. In this version, they are listed by TMDL parameter. Some actions may address more than one parameter but was listed where it is considered a key action for that parameter (and therefore was listed once). Use the matrix to identify actions that DMA will undertake.

### **Key Actions to Address Bacteria – focus on source control and storm water management:**

1. Human Waste Management – *goal is to identify and reduce sources of human waste:*
  - Is there a sewer system?  
If so, are there problems that have been identified or suspected – e.g. I/I problems; by-pass problems; treatment problems; plans to update system, especially in the next permit cycle; is financing in place...  
[Resource – permit program]
  - Are there any known on-site system concerns (e.g. old systems, suspected failures, etc)?  
If so, are there plans for providing sewers or up-grading systems, opportunities for addressing concerns working with county on-site program, are there opportunities for home owner education [resource – on-site program]
  
2. Storm Water Management – *goal is to reduce bacteria concentrations in storm water and to keep it from reaching the river:*
  - Is there an existing storm drainage system?  
If so, are there cross-connections; is there a management plan in place; are there pollution reduction facilities or other pollution controls in place and are they maintained. [Resource – storm water program (phase 1 and 2 guidance), storm water position]
  
  - Are there streams listed or identified as being of concern for bacteria in the area?  
Is there a monitoring component to identify loads, source types, etc. [note – while we may not want small DMAs doing monitoring, it would be good to get some site specific data, perhaps through a subbasin level effort for monitoring. Resource – work with watershed council, other to target monitoring efforts as needed]

3. Education – *goal is to increase public awareness:*

- Are there educational opportunities for addressing pet and other animal waste management? Are there areas where animal wastes are of concern (coordinate with ODA/SWCD if agriculturally related)

If so, identify plans/means to provide that education [Resource - provide a list of websites with good materials]

4. Planning – *goal is better planning to prevent problems based on need or opportunity*

- Is growth occurring or planned? Is a Comp Plan review coming up?

If so, what controls have been developed or are proposed for addressing storm water, what is identified in local comp plan and when is the next update [Resource – Model Development Code & User Guide for small cities]

**Key Actions to Address Mercury – focus on source and erosion control:**

1. Erosion Control – *goal is to control erosion of native soils*

- New Construction sites greater than 1 acre

Is the DMA aware of the 1200C program, does it have an opportunity to provide information about the program and to encourage builders to comply, are they interested in being an agent for the program [Resource – 1200C website and materials]

- New Construction under 1 acre or other erosion concerns

Is this of concern in the area (e.g. is there much building going on, are there local ordinances that can address this activity or are changes in local ordinances planned [Resource – Model Development Code & User Guide for small cities]

2. Roads/Storm Water – *road ditches and stormwater conveyances are a major pathway for delivering sediment to waterways, goal is to prevent and reduce sediment from getting to streams*

- Does the DMA maintain its roads (or is this done by the county?)

If so, what practices are followed for road operation and maintenance; Road Construction, Bridges? Are they comparable to ODOT practices? Training? [Resource – ODOT Erosion Control Manual, Road Maintenance Practices, Environmental Performance Standards]

3. Mercury Source Reduction – *goal is to reduce sources of mercury*

- Does the DMA run a treatment plant and have dentist offices in its service district?

If so, are pretreatment practices encouraged [Resources – DEQ/ACWA Water Pollution Prevention Tips for Dentistry]

- Are there other opportunities for encouraging mercury source reduction?  
Fluorescent light recycling, mercury “switch out”, etc [Resource – OEC Mercury Reduction Partnerships]

**Key Actions to Address Temperature – focus on riparian protection and management, education and encouraging voluntary actions:**

1. Riparian Protection – *goal is to protect and enhance shading along streams*
  - Local Comp Plan protections  
What types of buffers are currently provided? Are there plans to revisit comp plan in next 5 years? Would these meet safe harbor designations?  
[Resource – Model Development Code & User Guide for small cities]
  - Are there opportunities for the city to improve riparian conditions?  
Does the City have park lands and other municipal areas where riparian areas can be restored? Are there active partnerships (e.g. watershed councils, etc) for watershed restoration with which the city could become involved? Are there efforts for improving other riparian functions – stream structure, enhance hyporeic flow, cold water refugia, etc. Are there possible trading opportunities [Resource – OWEB]

**Other Linkages:**

It would be good to look at cross-programmatic opportunities where several environmental concerns can be addressed:

- Source Water Assessment
- Underground Injection Control
- Clean up concerns
- Hazardous Waste Generation

**Additional Information Needed to Complete the Plan:**

- Monitoring/Evaluation – This should be part of the matrix for each action. A separate subbasin monitoring plan may also be developed and should be referenced.
- Reporting and Adaptive Management – This should be part of the matrix for each action along with an annual (?) report and 5-year adaptive management and plan update.
- Evidence of Compliance with Land Use Requirements – short statement on how these actions and this plan is consistent with local planning requirements.
- Additional Requirements?