

Total Maximum Daily Load (TMDL) and TMDL Implementation Plan for Fecal Pathogens in Dickinson Bayou

August 16, 2010



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Status of TMDLs at a Glance

Bacteria TMDLs:

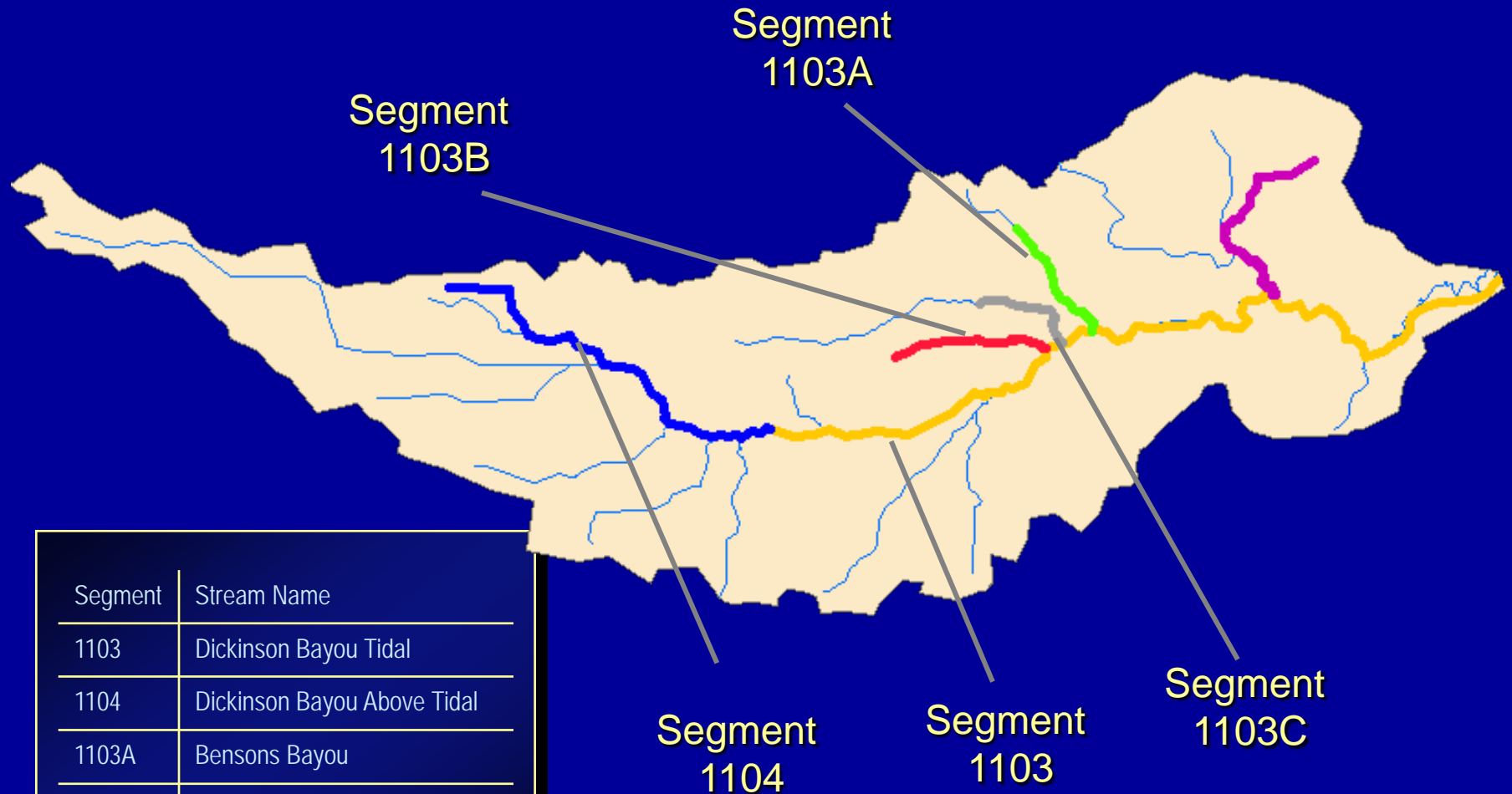
- Draft TMDL document completed in April 2010 and is currently under review by TCEQ and TSSWCB
- Expected release for public comment in 2010

Dissolved Oxygen TMDLs:

- Additional sampling and modeling are currently underway
- Adoption not expected until 2015

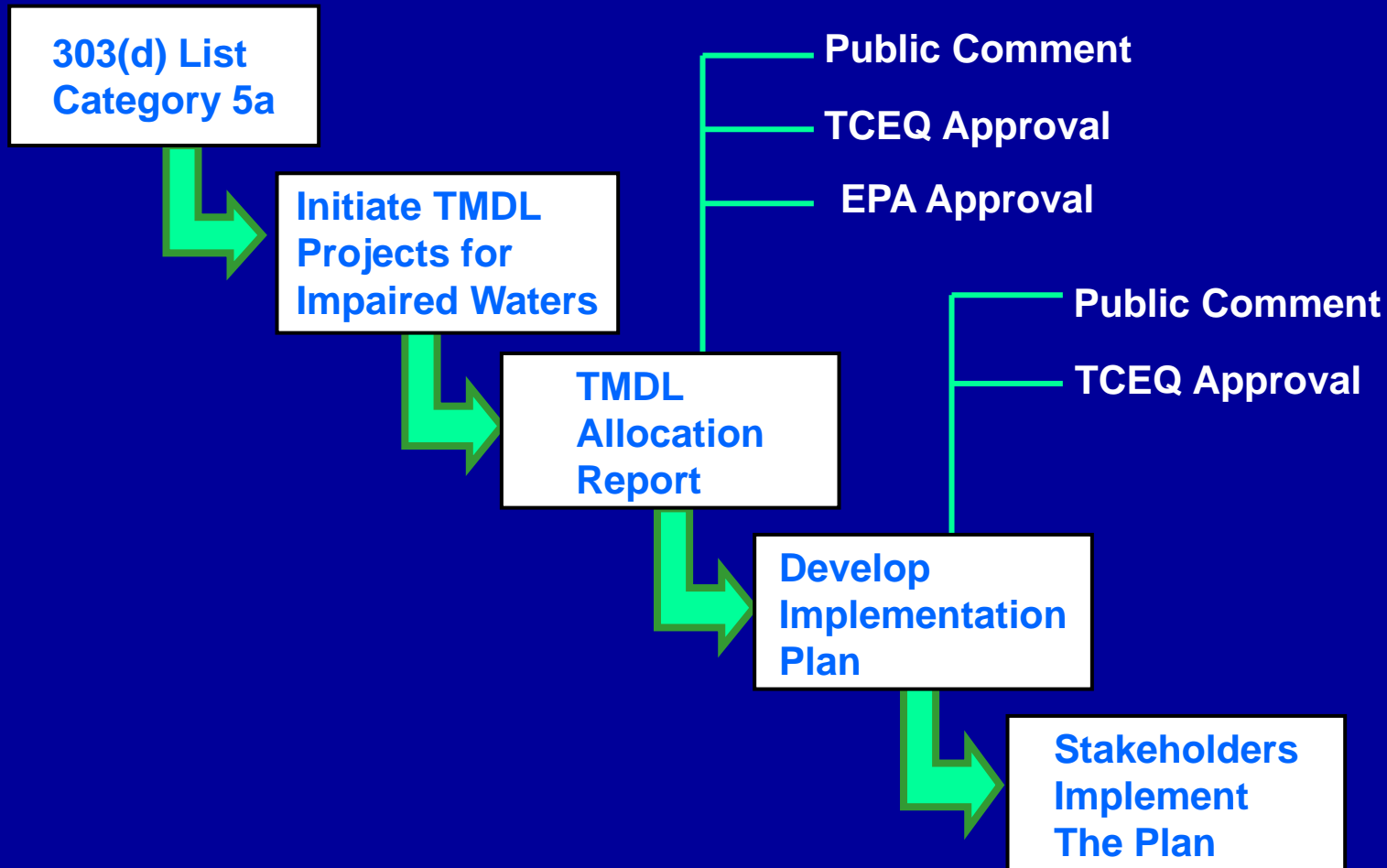


Bacteria TMDL Segments

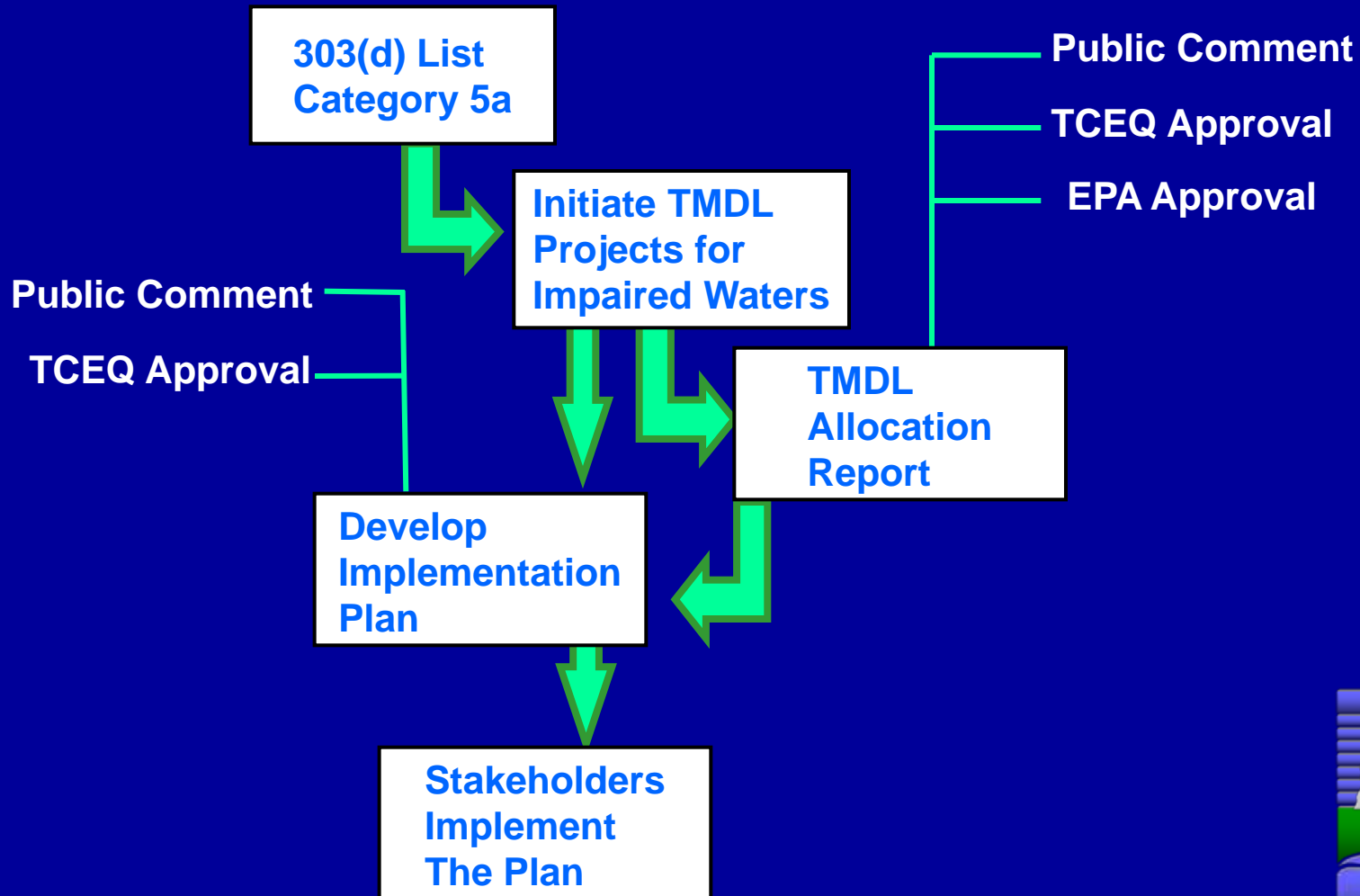


| Segment | Stream Name |
|---------|-----------------------------|
| 1103 | Dickinson Bayou Tidal |
| 1104 | Dickinson Bayou Above Tidal |
| 1103A | Bensons Bayou |
| 1103B | Bordens Gully |
| 1103C | Geisler Bayou |

TMDL Process



Dickinson Bayou TMDL Process



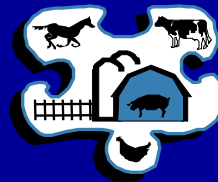
Two Kinds of Watershed Restoration Plans

- Watershed Protection Plans (WPPs)
- TMDL Implementation Plans (TMDL IPs)
- Both have the same goal — improving water quality in rivers, lakes, or bays
- TMDL IPs are remedial actions for impaired waters; WPPs may be either remedial or preventive
- TMDL IPs are based on TMDLs; WPPs may use TMDLs or other measurable goals for water quality



What Are WPPs and TMDL IPs?

- Watershed protection plans and TMDL IPs:
 - Define actions needed to reduce pollution and restore water quality
 - Include voluntary actions for water quality restoration (TMDL IPs include regulatory actions)
 - Are developed in cooperation with regional and local stakeholders
 - Are based on the best available scientific methods and tools



Implementing TMDLs

- TMDL IPs are collaborative efforts and involve a wide variety of stakeholders
 - Citizens, watershed interest groups
 - State, local, and federal agencies
 - Regulated entities
- Control actions for point source discharges and best management practices for nonpoint sources
- Plans may be phased; the phases are based on progress in water quality improvement
- Water quality improvement may take years
- Follow-up monitoring is important



TMDL IP Control Actions

- TMDL Waste Load Allocations affect permits
 - New, amended, or renewed permitted loads must be consistent with the TMDL allocation
 - TCEQ may initiate amendments to impose new limits, or may impose them with routine renewals or amendments
 - Permitted loading from existing facilities may be substantially reduced
 - New facilities may be required to meet more stringent effluent limits



TMDL IP Control Actions (continued)

- TMDL Waste Load Allocations affect permits:
 - In some areas, storm water permits may receive new or more stringent limits consistent with TMDL Waste Load Allocations
 - Permittees may no longer be eligible for general permits
 - Additional monitoring and reporting requirements may be needed
 - Permittees may have the opportunity to negotiate effluent trading agreements in order to meet net load limits for the watershed

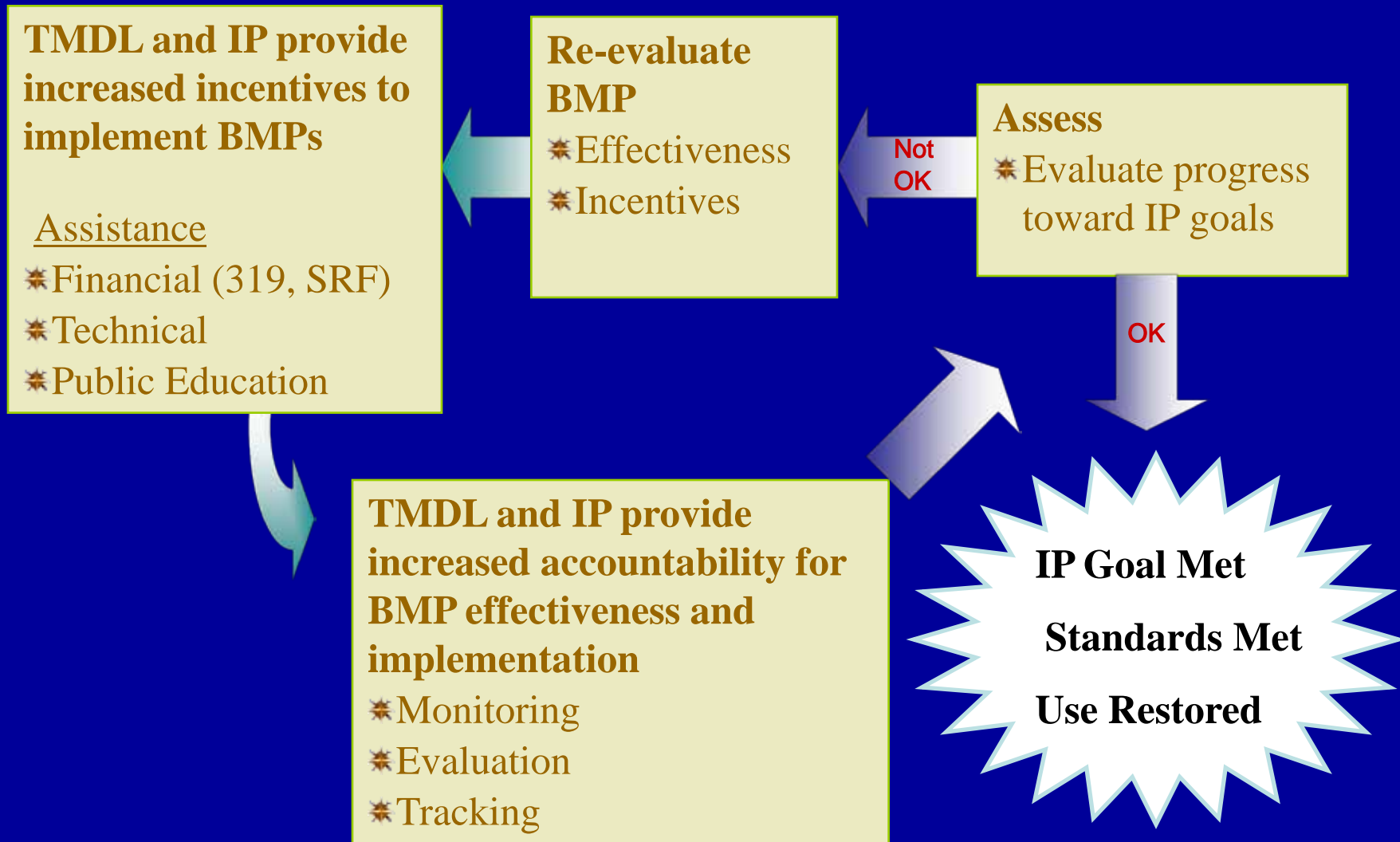


Management Measures

- Nonpoint source TMDL allocations may result in implementation of best management practices (BMPs):
 - Managing runoff:
Detention basins, filter strips, infiltration basins, porous pavement, retention ponds, swales, etc.
 - Decreasing pollutants in runoff:
Spill prevention and control, source controls (OSTs), education, etc.
- Watershed management is an iterative process



Management Measures



For Dickinson Bayou...

- Implementation of WPP Measures (more 319[h])
- Adoption and Approval of Bacteria TMDLs
- Completion and Approval of Bacteria TMDLIP
- Revision of WPP document
- Revision of Draft DO TMDL*
- Adoption and Approval of DO TMDL*

*If Observed DO < Optimum Criteria



Opportunities for Public Involvement

- Texas AgriLife has agreed to contract with the TCEQ for TMDLIP and revision of the WPP:
 - Work Order #9; effective in September 2010
 - Includes tasks for stakeholder and public participation
 - TCEQ expects to work closely with the Dickinson Bayou Watershed Partnership
 - Target date for draft TMDLIP and revised WPP = August 2011





www.tceq.state.tx.us/implementation/water/tmdl/17-dickinson.html

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