


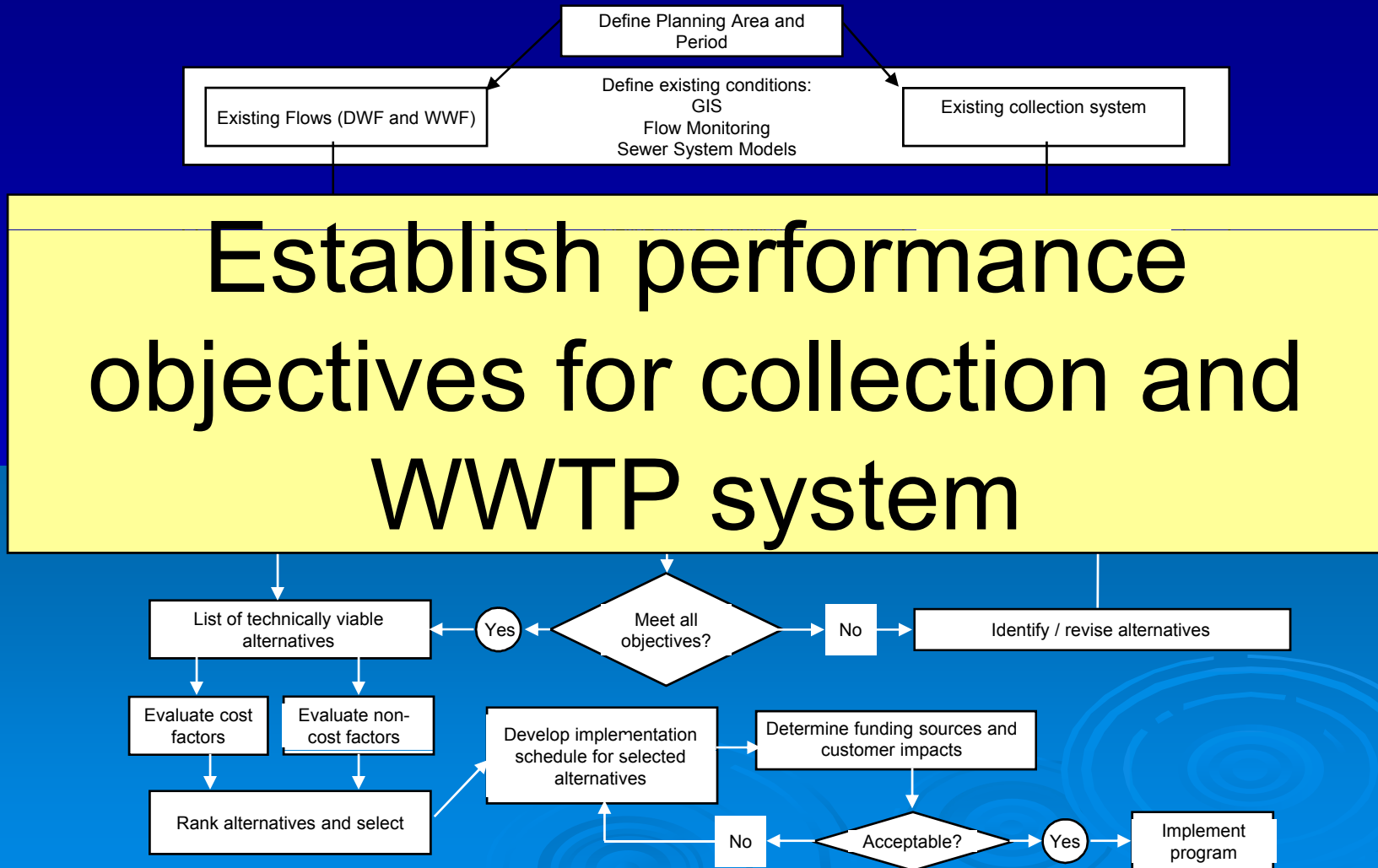
Bob Matthews

**Wet Weather Issues Forum
Risk Mgt Based Capacity Planning**

**Washington, DC
May 7, 2007**



Traditional Facilities Planning



Applying a Comprehensive Approach

A holistic, watershed-based approach:

Integrate conveyance and treatment processes to effectively manage wet weather flows

- Recognize flow inter-dependence
- Cost-effective alternative analysis
- Performance Objectives Based on Risk are Different for Wet Weather

Risk Analysis as a Tool

POTWs challenge is to present opportunities for performance improvement consistent with regulatory framework

- Deficiency versus Failures
 - Assessment supports feasible alternatives analysis
 - Key to demonstrating regulatory compliance
- POTW values and goals
 - Brings stakeholders to the table for education and support
- Performance Objectives and Measures
 - Builds performance documentation
 - Provides basis compliance assessment

Performance Objectives Based on Risk

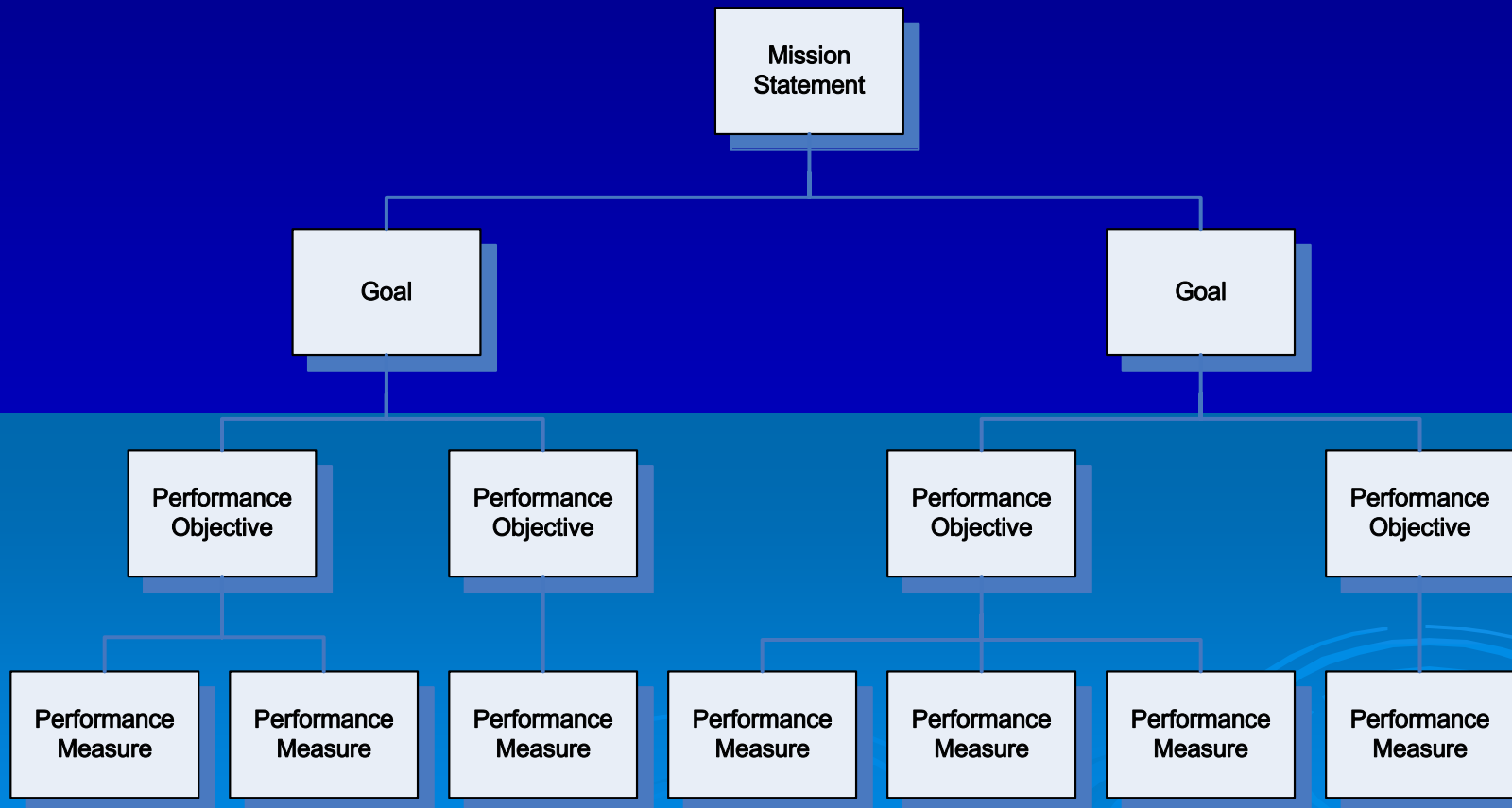
Develop POTW values and expectations:

- Guide provides overview of:
 - Mission
 - Goals
 - Performance Objectives
 - Performance Measures

Common to modern business management
approaches

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Performance Objectives Based on Risk



Performance Objectives and Measures

POTWs must translate mission and values into specific performance objectives and measures


- Approach is used in other infrastructure planning documents (AwwaRF and NACWA)
- Brings stakeholders together to improve understanding

Risks cannot be eliminated

But we can assess and manage risks

- Frequency/probability
- Consequences/severity

And we can use these assessments to help develop solutions that work for a community.



Community Sewerage Related Values at Risk

- Protection of public health
 - Protection of the environment
 - Protection of real property
 - Compliance with regulatory requirements
 - Affordability
 - Community aesthetics
- 

Guide Recommends Structured Approach

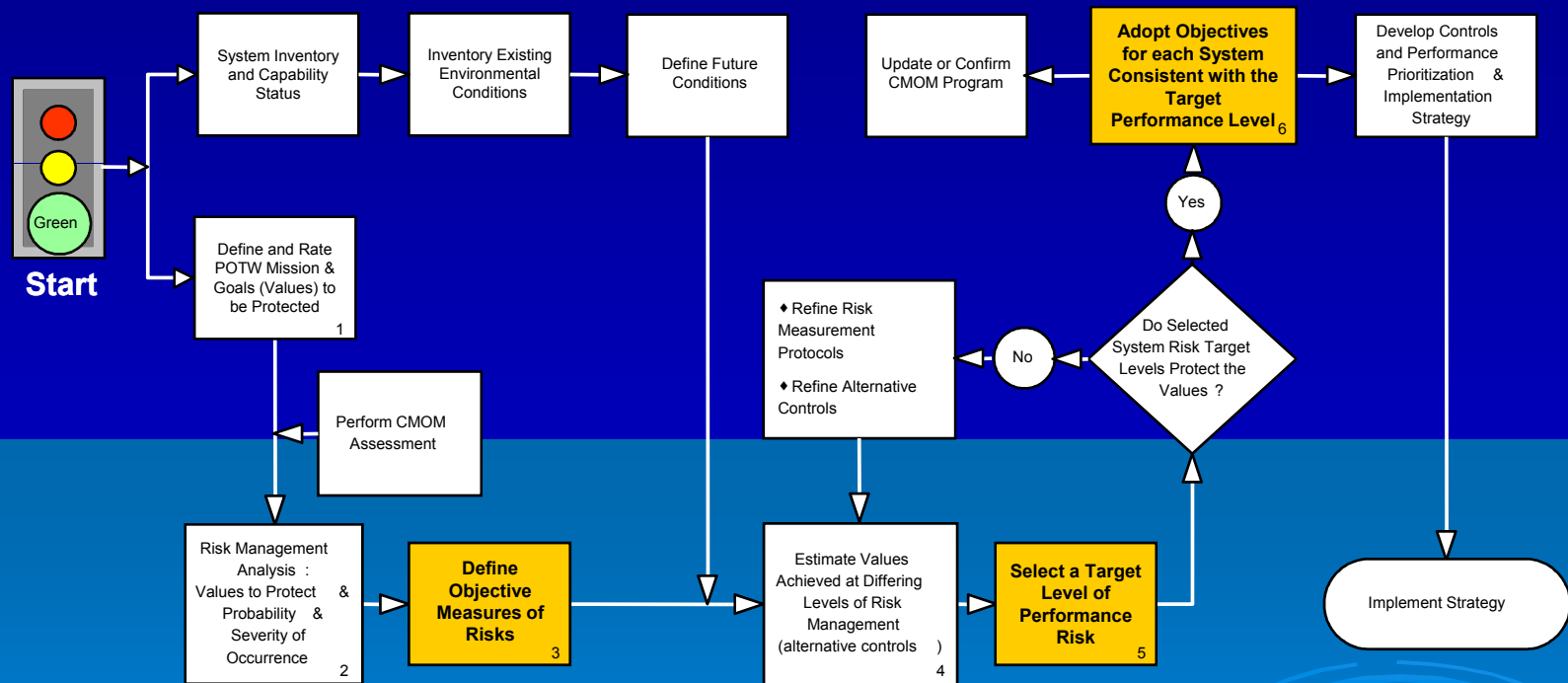
- 1) Define and score or rate the values to be protected or achieved and confirm with stakeholders.
- 2) Define the risks that could prevent POTW from achieving the defined values.
- 3) Define objective measures of sewerage related risks

Structured Approach (cont.)

- 4) Estimate the values achieved at different levels of risk management.
- 5) Select target levels of performance risk
- 6) Adopt objectives for each system consistent with the target level of risk.
- 7) Develop implementation plan.

This process involves commitment to stakeholder involvement and communication

Approach Uses Performance Objectives



Final Step

POTW must explain why its wet weather management plan complies with CWA regulatory framework

- Document process
- Document alternatives
- Document performance
- Document benefits

