Tampa Bay Water, A Regional Water Supply Authority

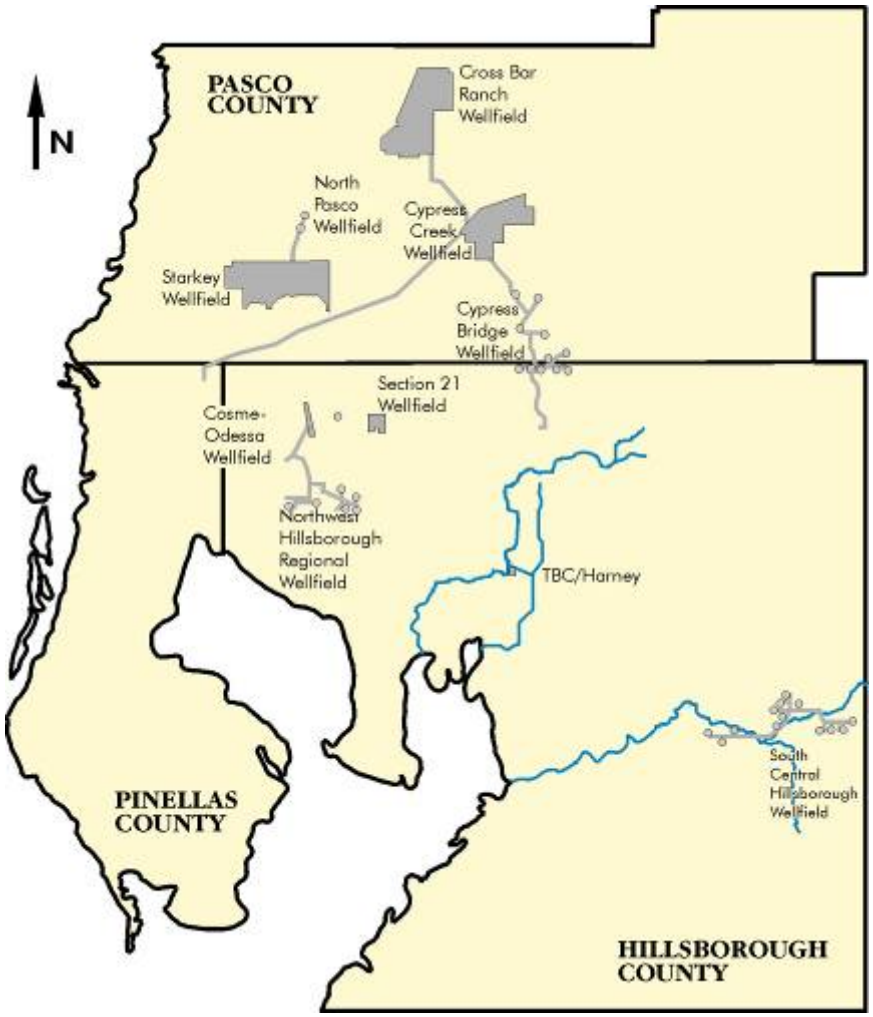
March 2007

Today's Topics

- **Looking Back: Cooperation Is Needed For Success**
- **Today's Challenges: Implementation and Continuing the Success**
- **Looking Forward: Quenching the Region's Growing Thirst and Source Water Protection**

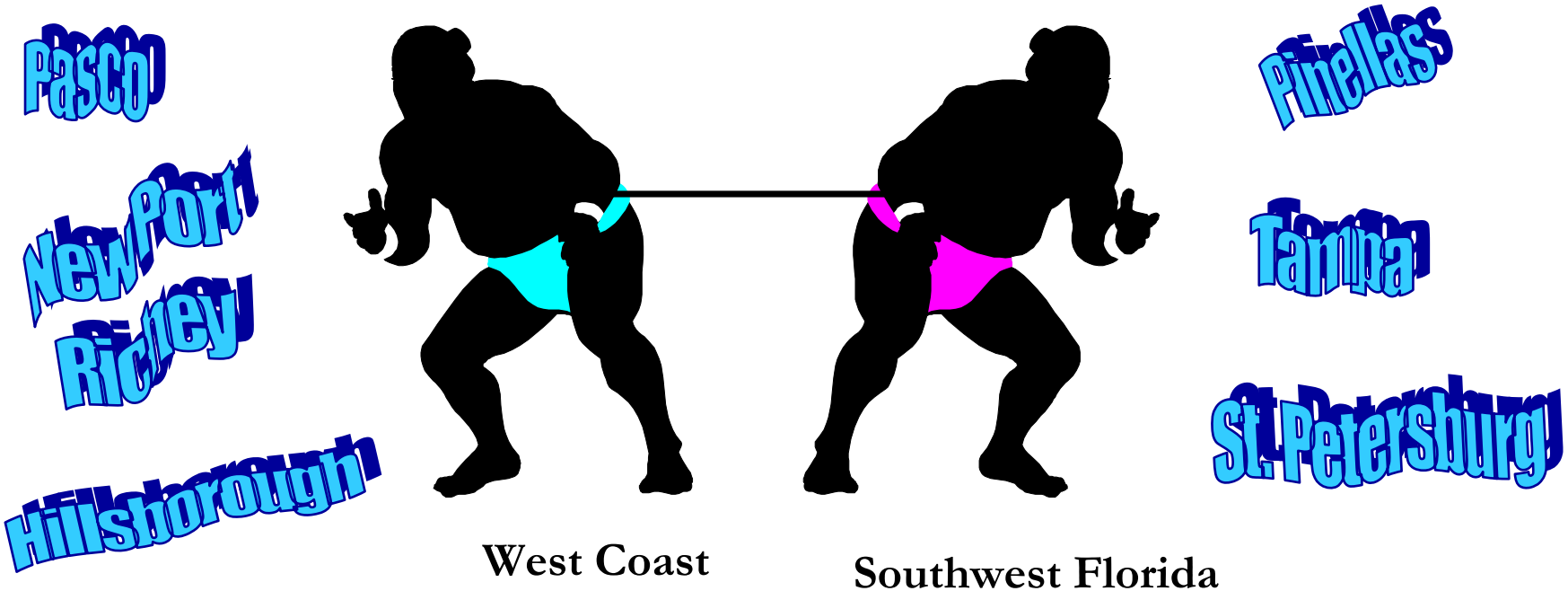
Looking Back…

West Coast Regional Water Supply Authority (WCRWSA) - 1998

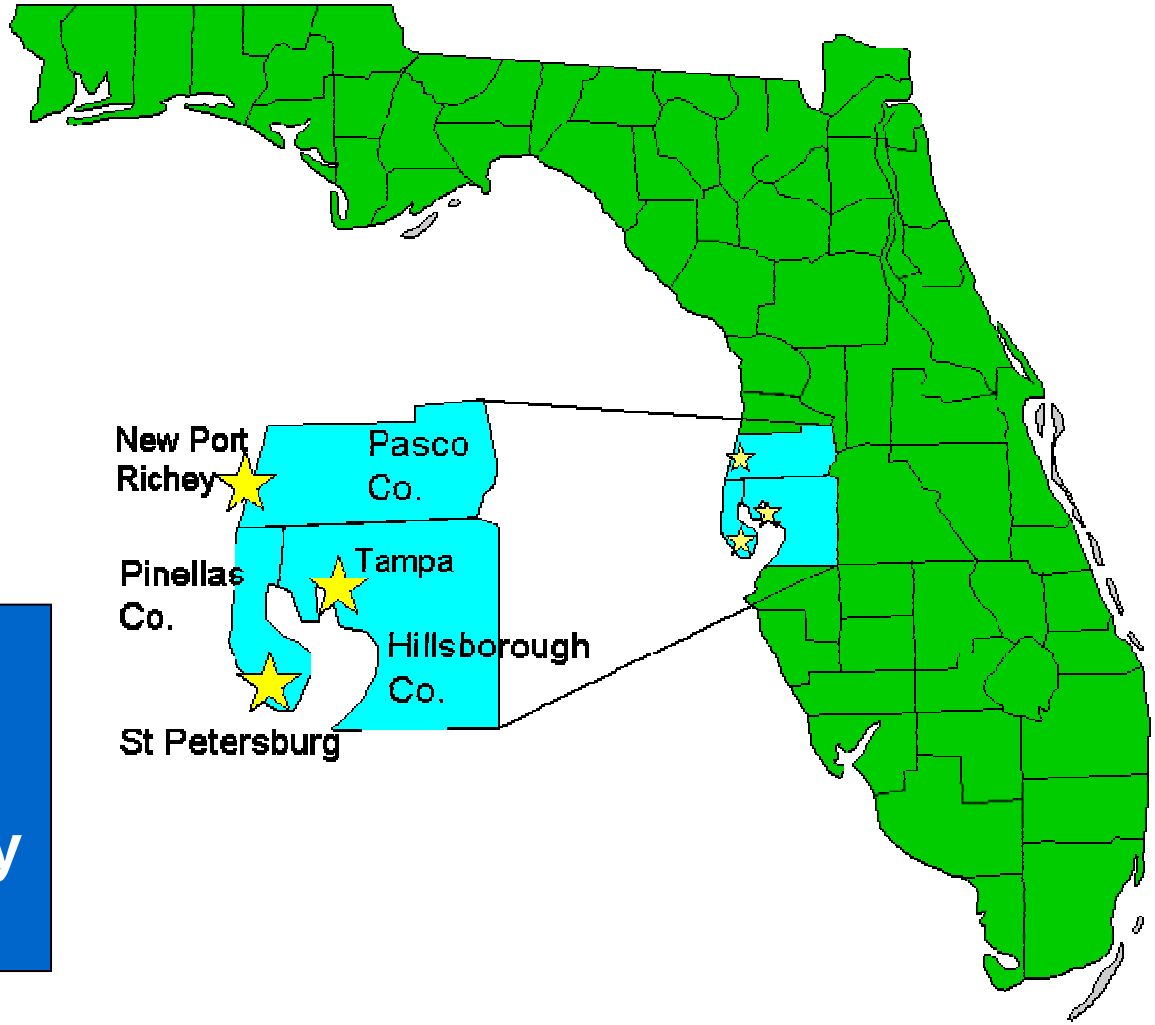


Environmental Conditions in Tampa Bay Area During 1990's

A Region At Odds



Creation of Tampa Bay Water - 1998

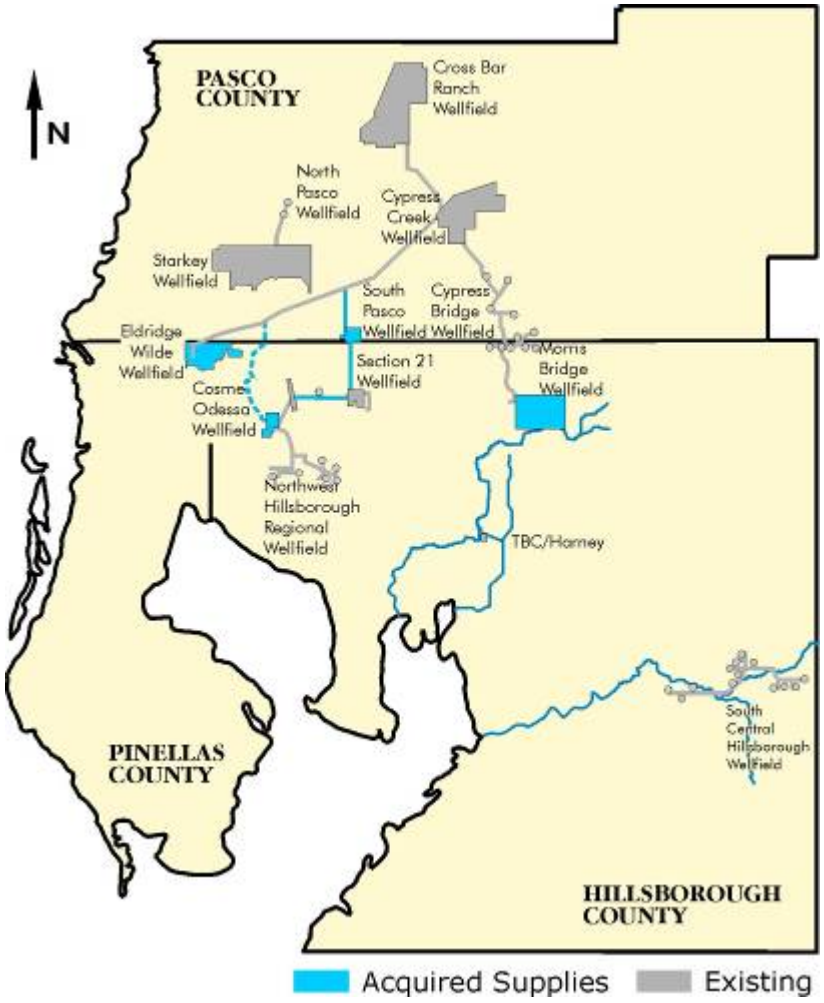


1.8 Million Residents Served

230 mgd Average Daily Demand

Regional Water System - 1999

100% of groundwater pumped from 13 wellfields



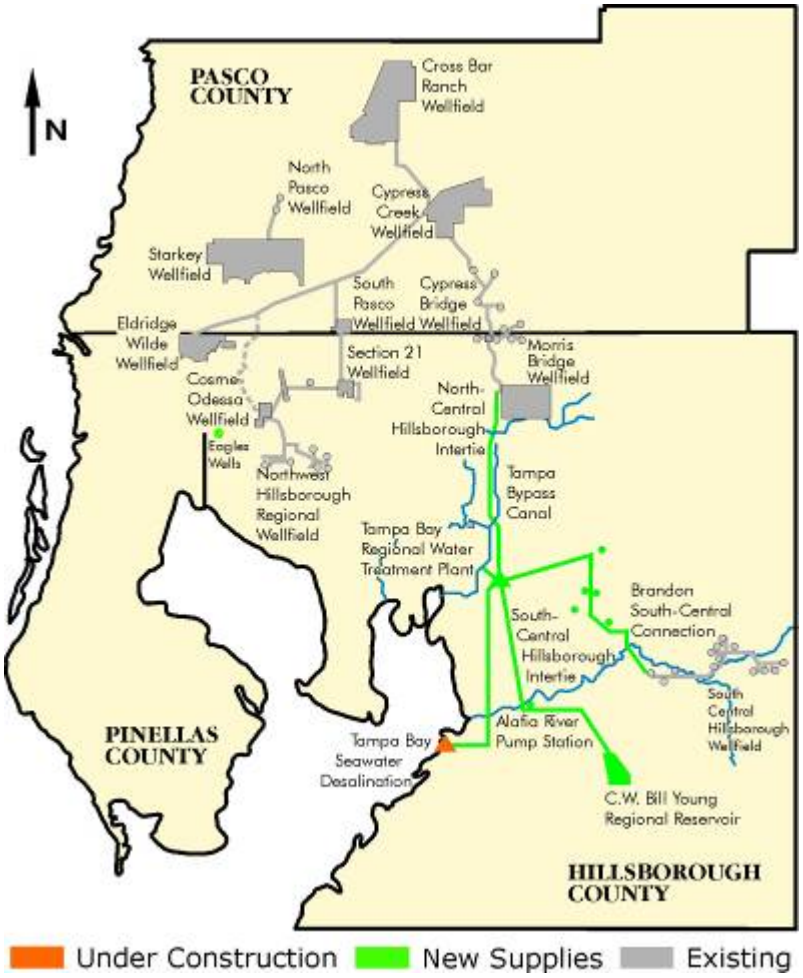
Master Water Plan – Configuration I

- **Master Water Plan:**
  - **$610 million of capital improvement projects**
  - **Includes surface water, groundwater, desalinated seawater**
  - **Provide diverse water supplies for a reliable, sustainable system**

Regional Water System – 2004

An integrated, *flexible* system that produces a su*stainable and reliable* water supply

Completed in 36 months



Enhanced Surface Water System

Tampa Bypass Canal

Regional Surface Water Treatment Plant

Alafia River Intake

Interconnected System

Brandon Urban Dispersed Wells

Built more than 60 miles of large diameter pipeline

Large Diameter Pipelines

C.W. Bill Young Regional Reservoir (15 billion gallon capacity)

Success Leads to Tangible, Measurable Accomplishments

Near Cypress Creek Wellfield – Mr. Sanford's Lake; Spring 2001

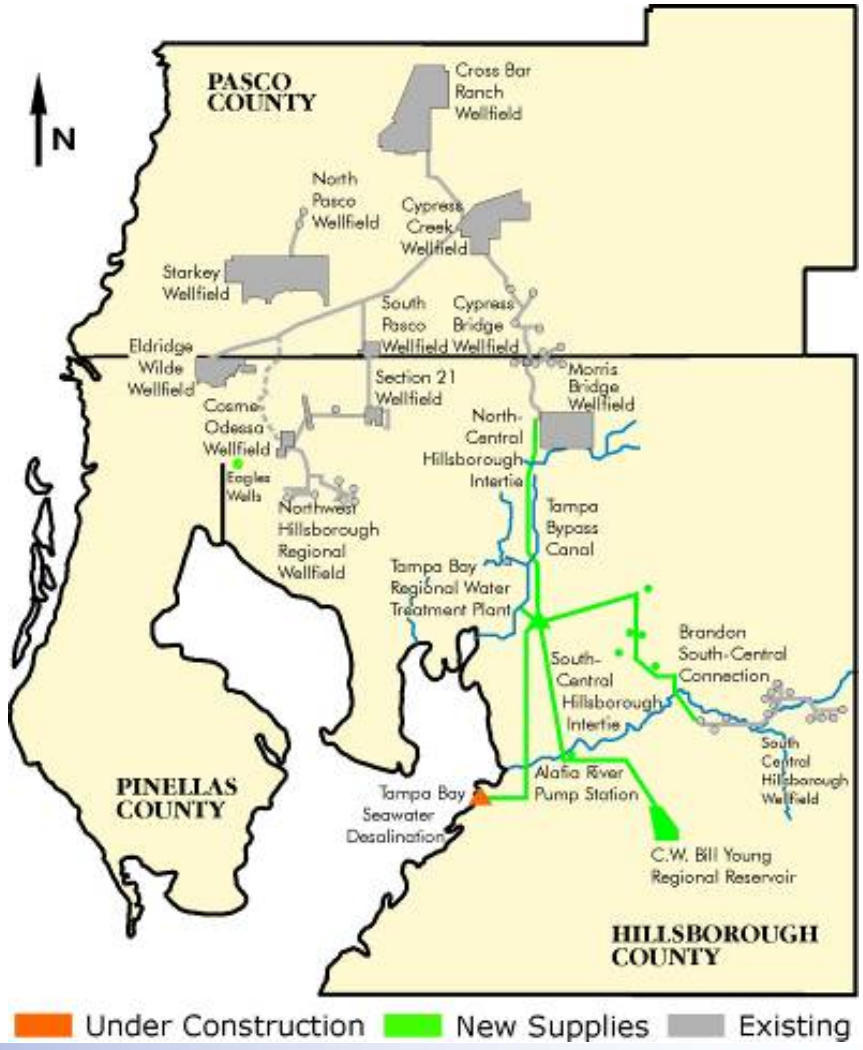
Near Cypress Creek Wellfield – Mr. Sanford's Lake; Spring 2005

Today's Challenges and Solutions…

Current Tampa Bay Water Responsibility

2.4 Million Residents Served (vs. 1.8 million in 1998)

250 mgd Average Daily Demand (vs. 230 mgd in 1998)



Tampa Bay Seawater Desalination

Current Desalination Partners

Providing up to $85 million to reimburse eligible capital costs of facility

Leasing site to project and providing electricity and source water for the desalination plant

Leading remediation efforts and plant operations and has operated and maintained the plant since January 2005

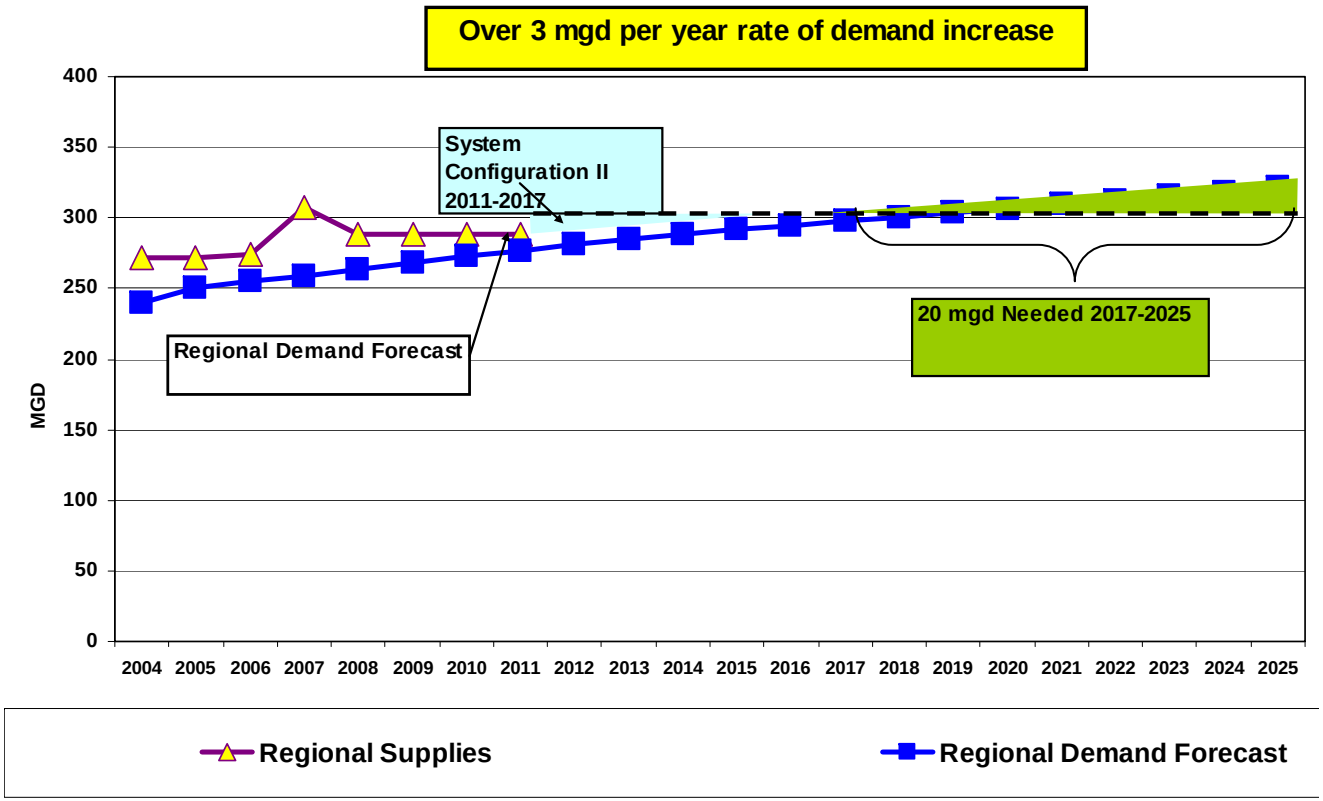
Facility Comparison

DE Filters – Mechanical Work

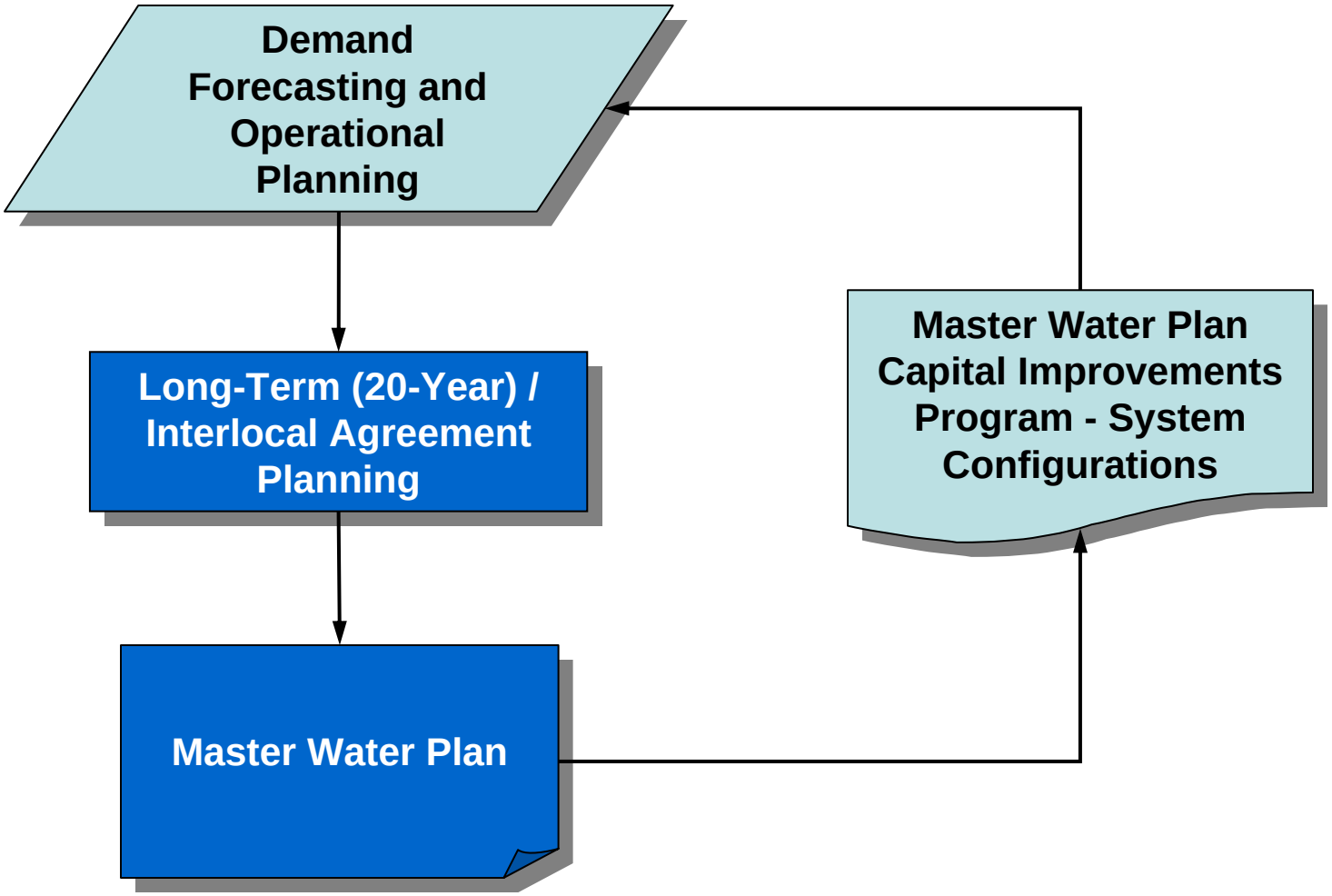
TAMPA BAY WATER

RO Membrane Installation

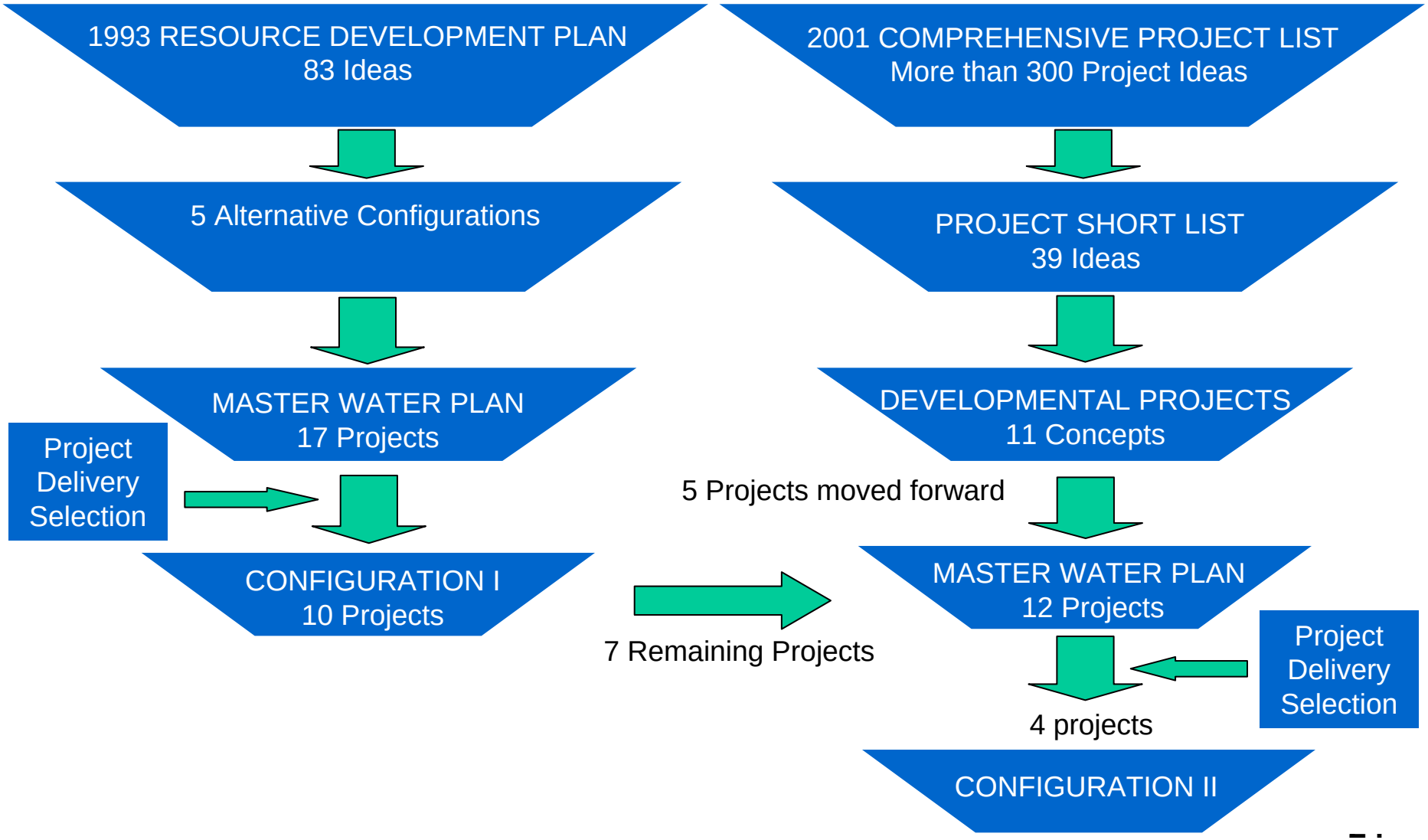
51 Million Gallons Per Day of New Supply Needed Through 2027



Water Supply Planning Cycle Components



Planning Process Leading to the Recommendation for System Configuration II



Paradigm Shift

- **Partnership with Southwest Florida Water Management District (SWFWMD) critical to ending "water wars"**
  - **Partnership mandated reduced wellfield pumping and provided funding for System Configuration I**
- **Alternative water supplies planned and developed**
  - **System Configuration II Cooperative Funding**

System Configuration II – Enhancements Phases A/B

- **Modified water use permits**
- **Increased pump station capacity at Bypass Canal**
- **Water treatment plant expansion**
- **Additional system pumping capacity**
- **Meets water supply needs through 2017**

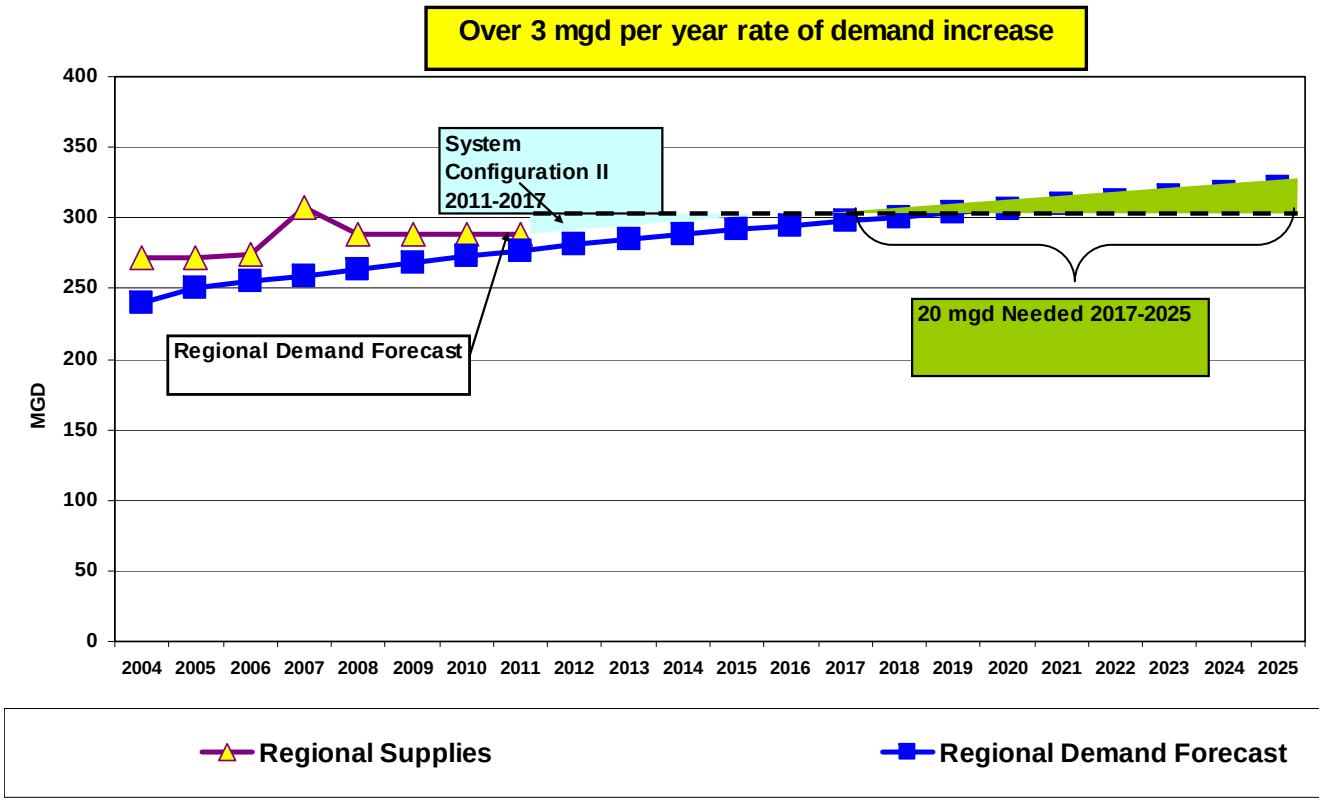
Future Potential System Configurations- Enhancements Phases C and D

- **Phase C – Second Regional Reservoir**
  - **Would require additional water supply**
  - **Proposes modifying Alafia River water use permit to capture additional higher flows**
  - **Timing would be after 2017**
- **Phase D – Downstream Augmentation**
- **Phases A-D could meet water supply needs through 2025**

C.W. Bill Young Regional Reservoir

Looking Forward…

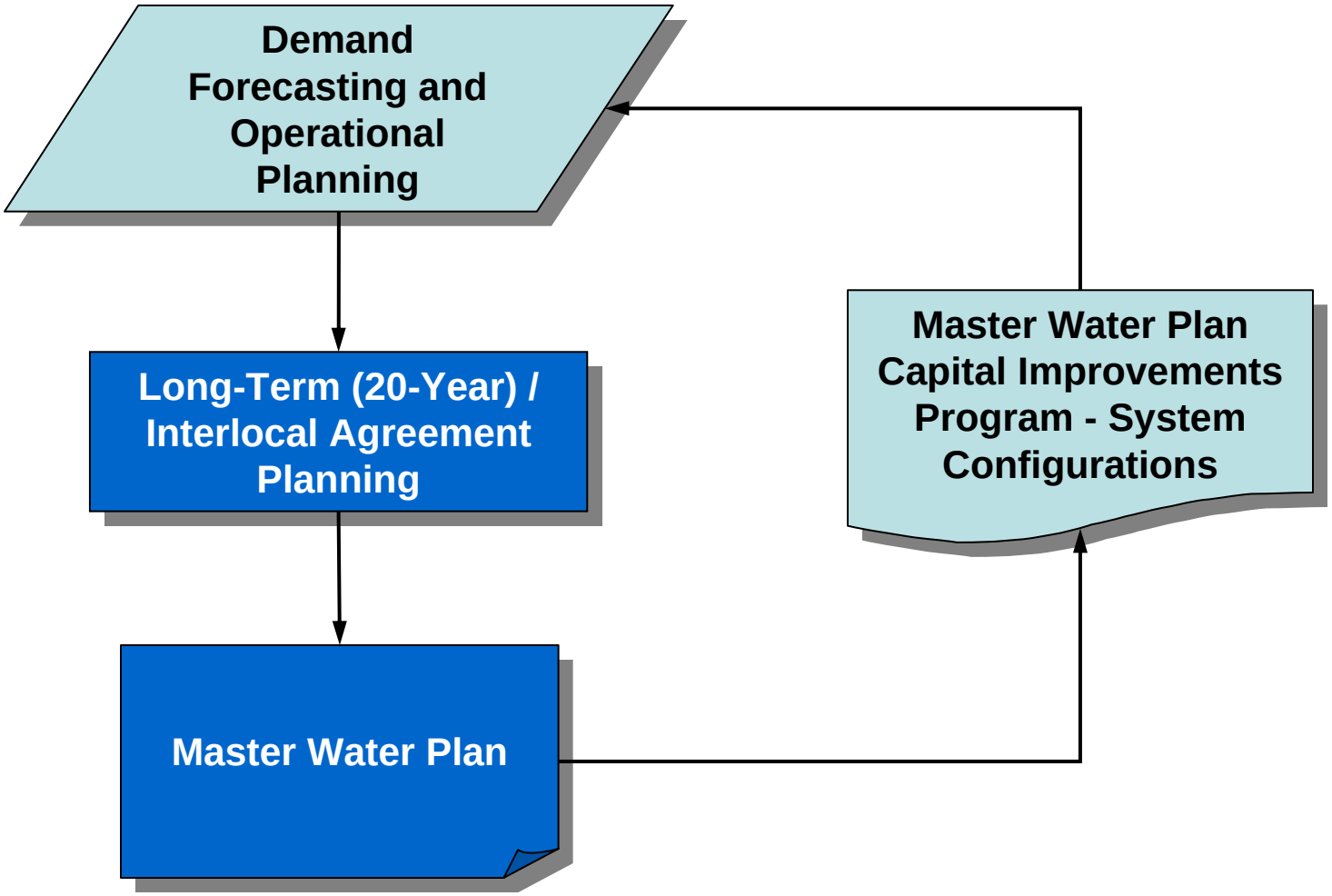
26 Million Gallons Per Day of New Supply Needed Between 2017 and 2027



Master Water Plan Conservation Goals

- **The Master Water Plan contains an aggressive conservation goal**
  - **10 mgd by 2000**
  - **17 mgd by 2005**
  - **21 mgd by 2010**
- **An 18 mgd savings has been achieved through 2006**
- **A total savings of at least 31 mgd is expected by 2010**

Water Supply Planning Cycle Components



Water Supply Planning Components

Ongoing/As-Needed

Demand Forecasting and Operational Planning

- DFS – Demand Projections
- Demand Management Planning
- OROP
- Supply Reliability Analysis
- Drought Mitigation Plan

Update Every 5 years

Long-Term / Interlocal Agreement Planning

- Background Data Analysis
- Comprehensive Project List (300+ ideas)
- Project Short List (39 ideas)
- Developmental Study List (11 project concepts)
- Update of Long-Term Water Supply Plan and Master Water Plan

Update Every 5 years or at Board Discretion

Master Water Plan

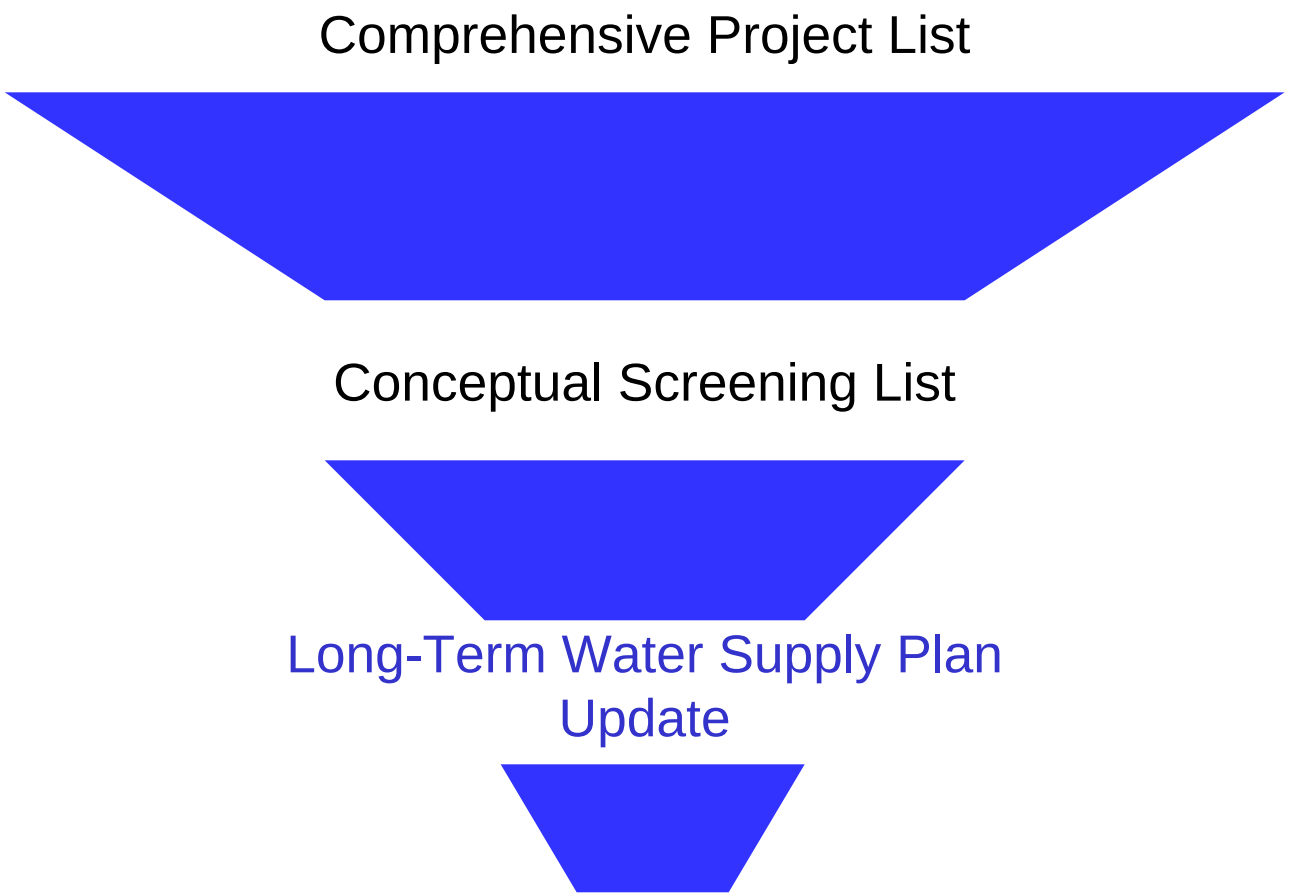
- Feasibility Study and Water Use Permitting
- Final Design, Permitting, Property Acquisition
- Construction

Update at Annual Budget or at Board Discretion

Master Water Plan–System Configurations

- System Configuration I
- System Configuration II
- Future Configurations
- Other Capital Improvements

Long-Term Water Supply Plan Update
Potential Project Screening Process



Source Water Protection Challenges and Planning

- Source water protection is developing and implementing measures to protect the environment and the drinking water supply.

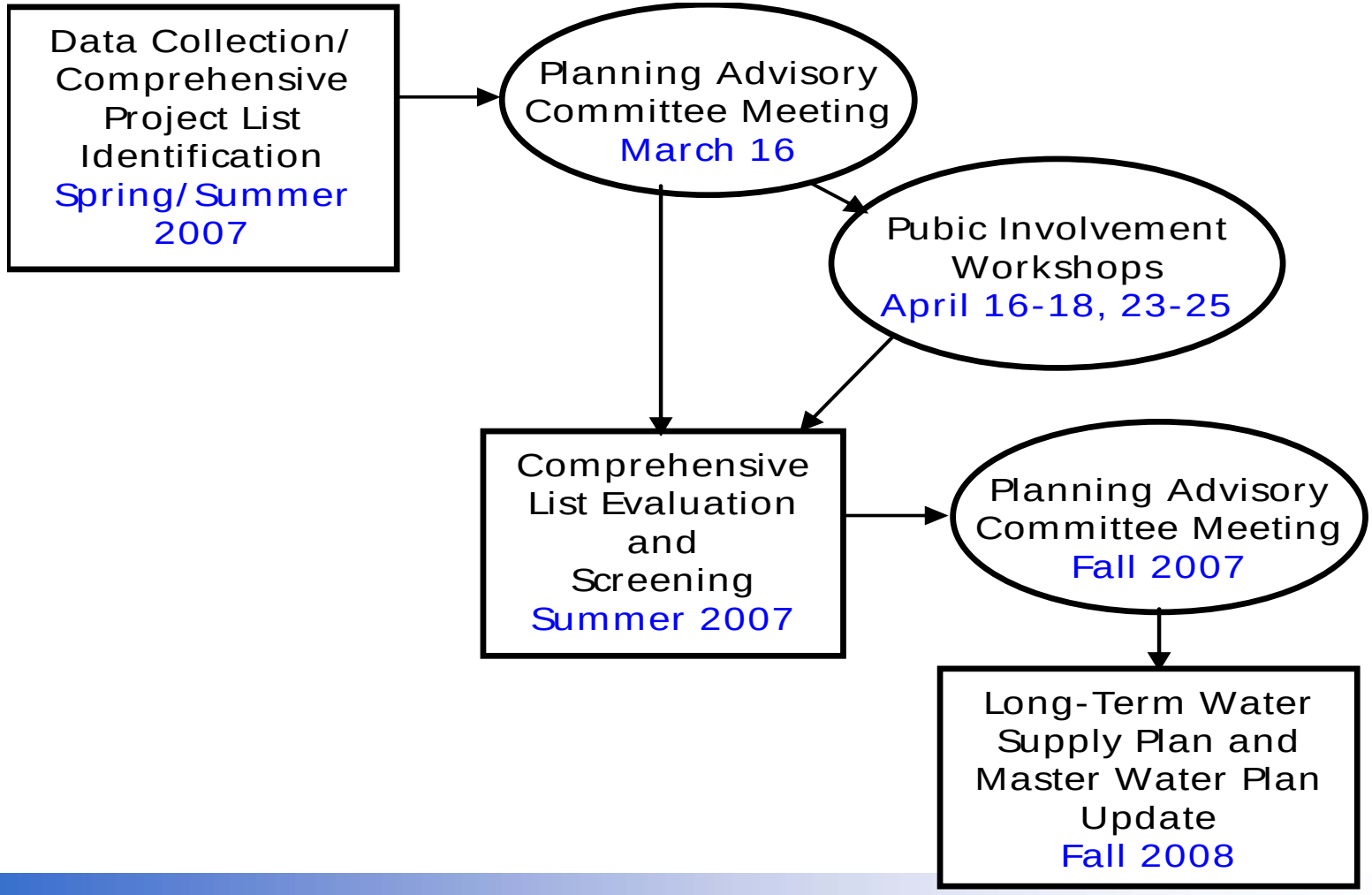
Why Source Water Protection?

- **“When drinking water think of its source” – Chinese Proverb**
- **“Filthy water cannot be washed” – West African Proverb**
- **An Ounce of Prevention is Worth a Gallon of Cure**

Long-Term Water Supply Plan Update
Source Water Protections Mechanisms

- Public Information and Education
- Protective Policies and Regulations
- Land Acquisition Programs
- Best Management Practices
- Local Watershed Protection Actions

Long-Term Water Supply Plan and Master Water Plan Update - Schedule



Tampa Bay Water is Working