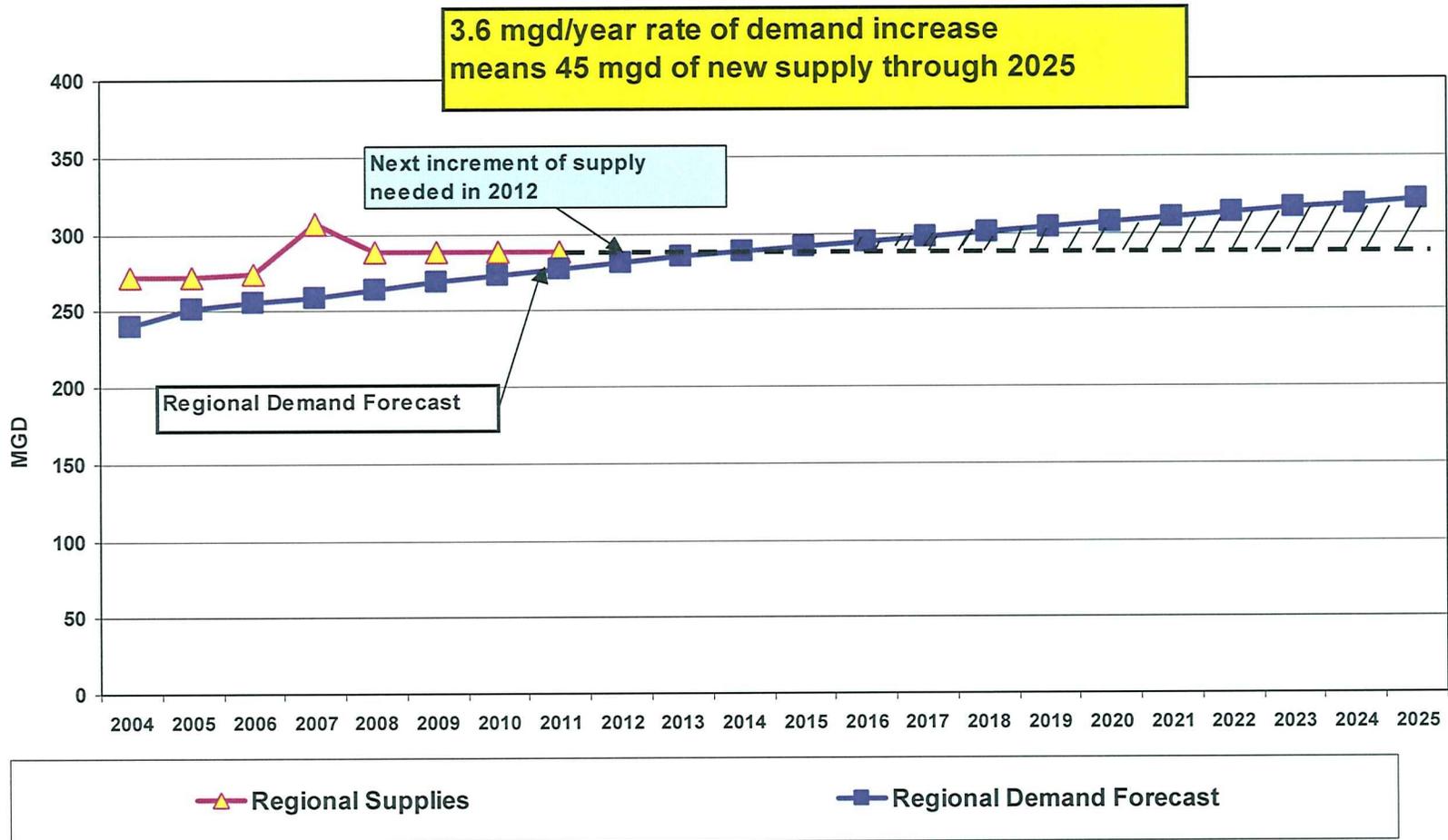


Tampa Bay Water Future Water Supply Needs and Choices

September 2006

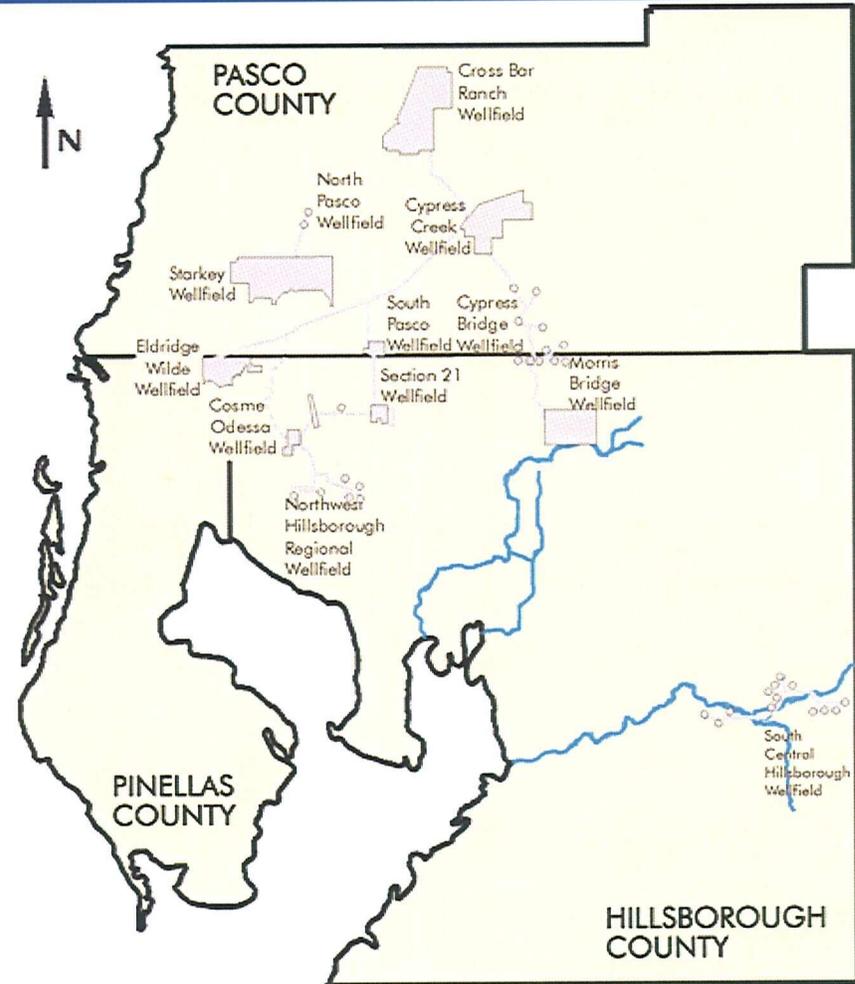
45 Million Gallons Per Day of New Supply Needed Through 2025



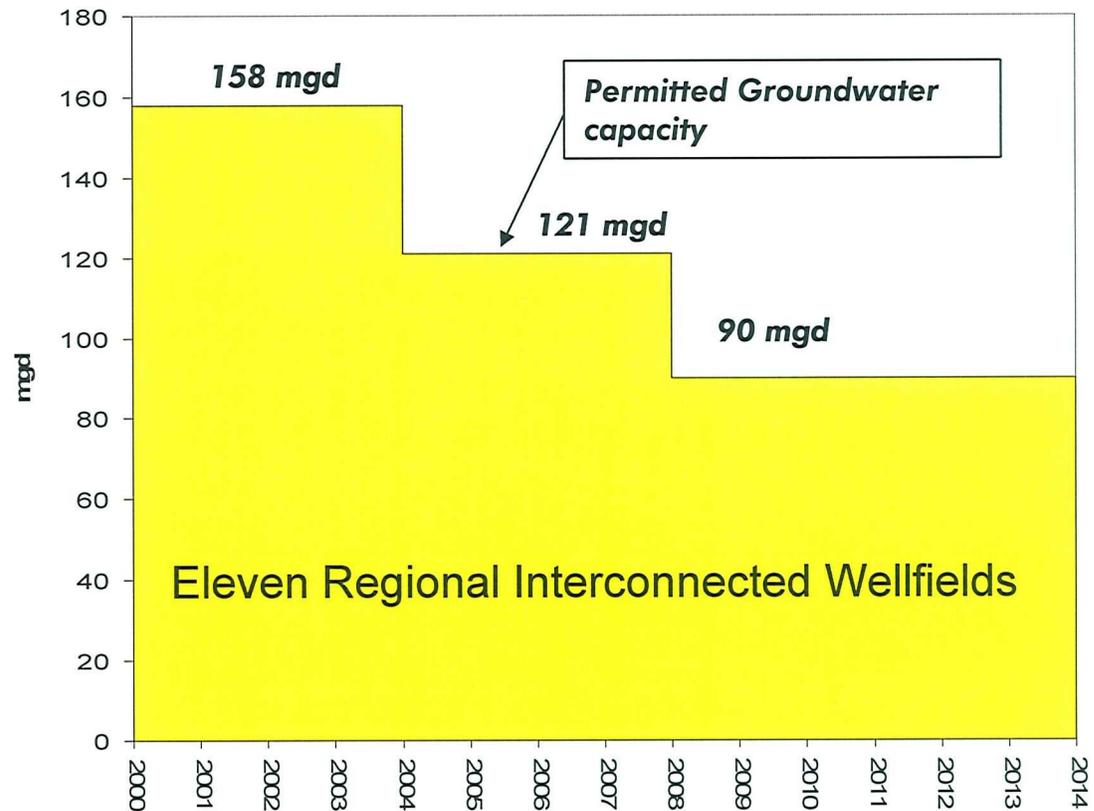
Drinking water supply projects chosen must be:

- 1. Environmentally sound***
- 2. Economical***
- 3. Technically feasible***

***Before 1998
Tampa Bay Water
system relied on
groundwater
supplied from area
wells***



- **End of 2003 groundwater pumping cut back to 121 mgd**
- **By 2008 to 90 mgd**
- **Alternative supplies to be developed**



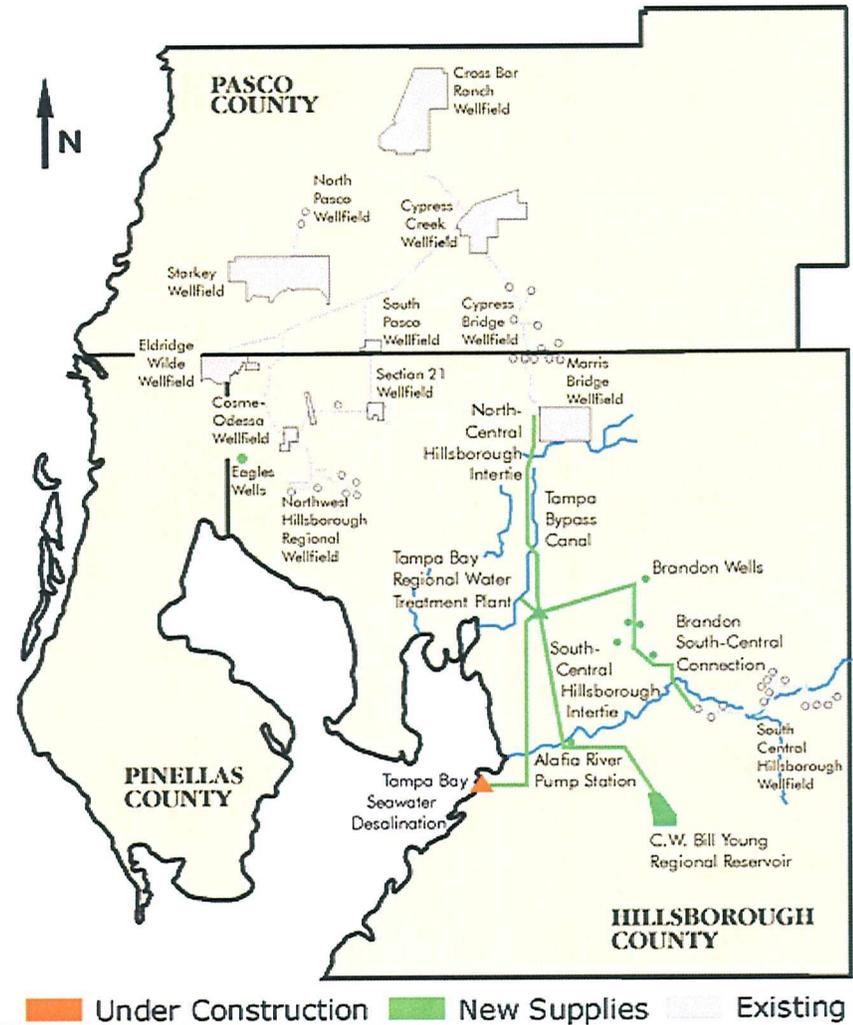
Mgd = million gallons water per day

Where we are today:
Tampa Bay Water Master Water Plan



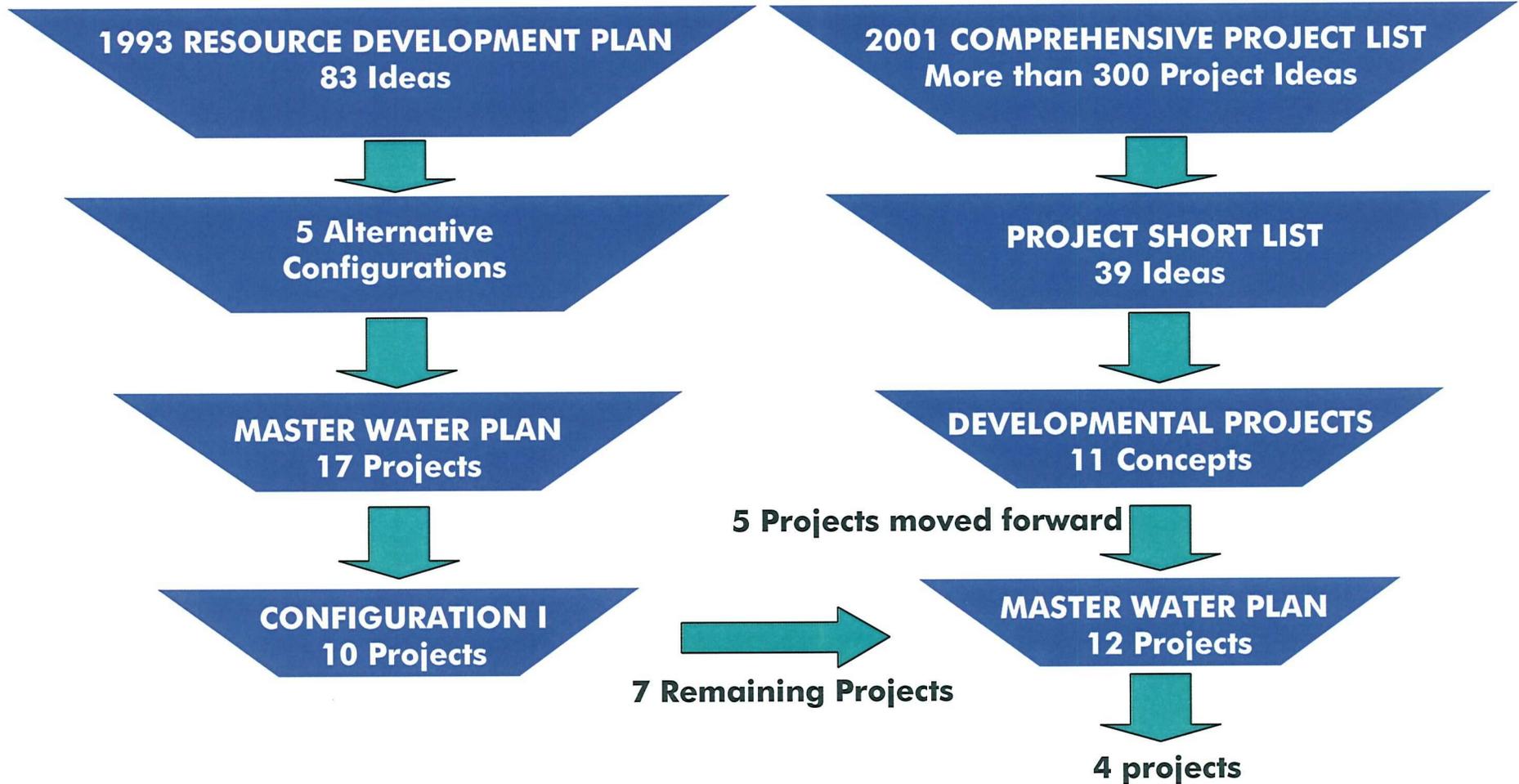
- ***Blueprint to meet long-term drinking water needs for the region & reduce groundwater reliance***
- ***Protects the Environment***

- **Groundwater pumping reduced substantially**
- **Alternative water supplies developed**
 - **Surface water**
 - **Seawater desalination**



- ***Alternatives are limited***
- ***Some 300 options have been studied & evaluated against criteria***
 - ***environmentally sound***
 - ***economical***
 - ***technically feasible***

Planning Process



- **Downstream Enhancements Project (Phases A & B)**
 - *Phased surface water development*
 - *25 mgd yield (both phases)*
 - **Downstream Augmentation Project**
 - *Reclaimed water augmentation of Hillsborough River and Tampa Bypass Canal*
 - *13 mgd yield*
 - **Mid-Pinellas Brackish:**
 - *Brackish groundwater in Pinellas County*
 - *5 mgd yield*
 - **Crystals International:**
 - *Groundwater and non-contact industrial process water*
 - *3.5 to 5.5 mgd yield*
- Mgd = million gallons water per day*

- ***Hillsborough River and Tampa Bypass Canal system currently provides region with water***
- ***Compatible with City of Tampa use***



- *Originated from discussions with technical/scientific community*
- *Series of projects could be developed in phases – to match growth of region*

- ***Modified Withdrawal Schedule for Hillsborough River and Tampa Bypass Canal***
 - ***Target Mid-range (Higher Flow) Periods***
 - ***Protect low and high flows***
- ***Environmental Assessment***
 - ***Comparison between current and proposed withdrawal schedule on each of the individual systems and cumulatively on the Hillsborough Bay***
 - ***Environmental assessment of the effects of withdrawals on salinity and key species***
 - ***Uses tools developed for Hydrologic Biological Monitoring Plan (HBMP)***
- ***Water Use Permit Modification Application will be presented to Tampa Bay Water Board at October 2006 Board Meeting***

- *Would increase drinking water supply through 2025*
- *Protects high and low stream flows*
- *Protects environment by reducing nitrogen loading to Tampa Bay (by withdrawals at higher flow levels)*



Phase A

- *Modify water use permits to use mid-range (higher flows)*
- *Increase pump station capacity*
- *Water treatment plant expansion*

Phase B

- *Additional expansion of water treatment plant*



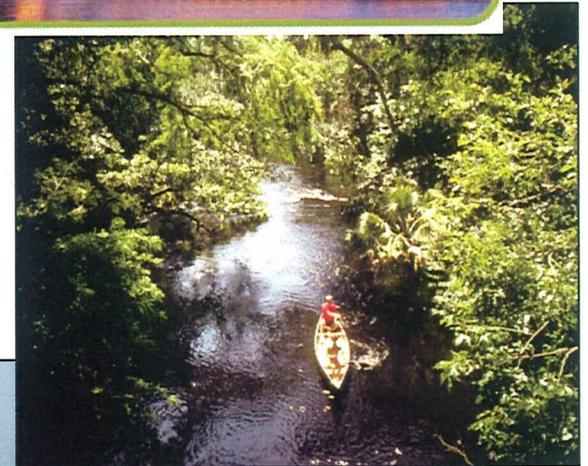
Phases C and D after 2017

- ***Downstream Augmentation (if not chosen by the Tampa Bay Water Board this fall) and/or Alafia River permit modification***
- ***Second Regional Reservoir***

Estimated cost: \$186 million (includes Phases A and B) for 25 mgd

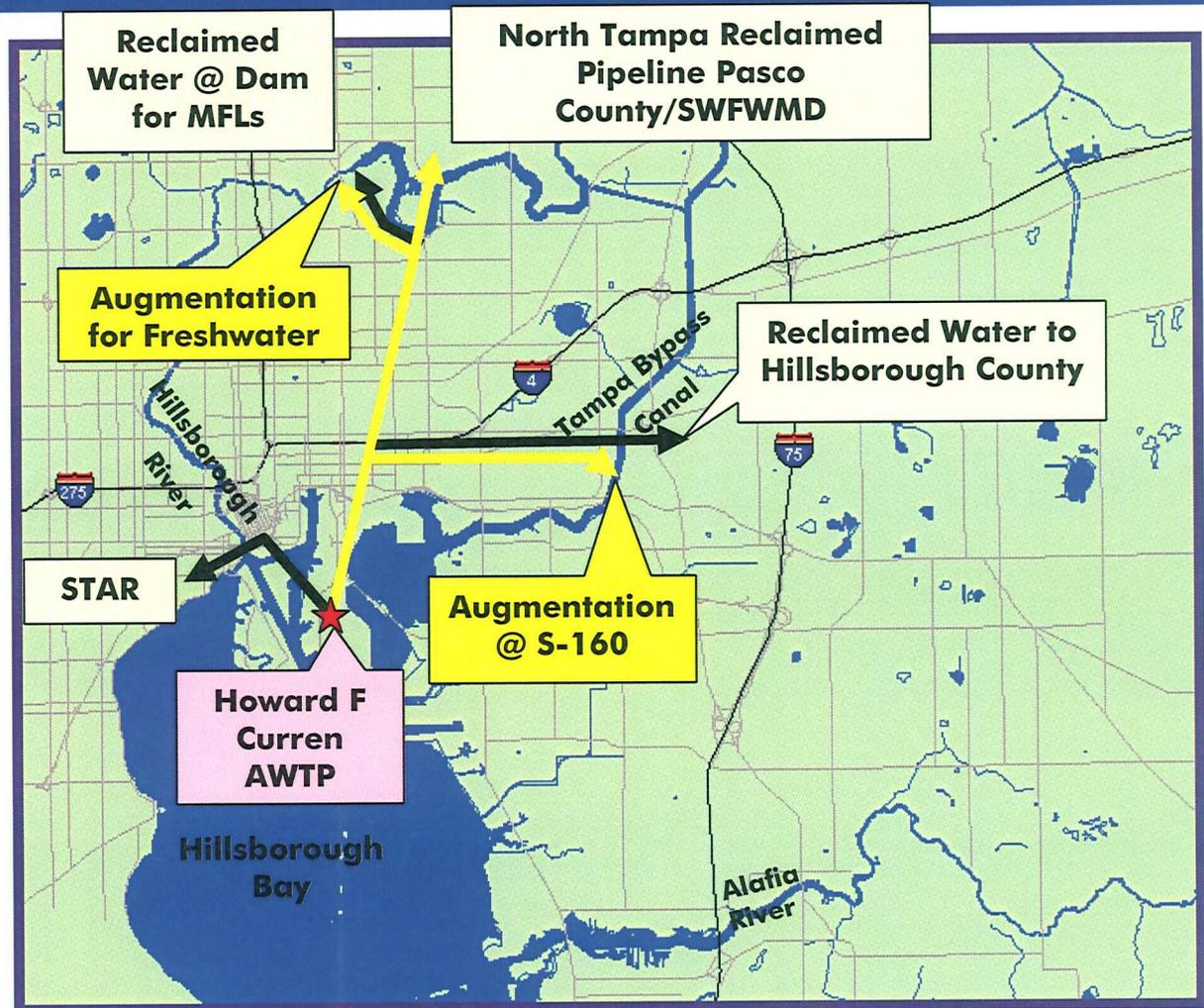
- Alternative Water Supply Project***
- Eligible for the Southwest Florida Water Management District and potentially State and Federal co-funding***

- *Environmentally sound*
- *Cost effective*
- *Comprehensive*

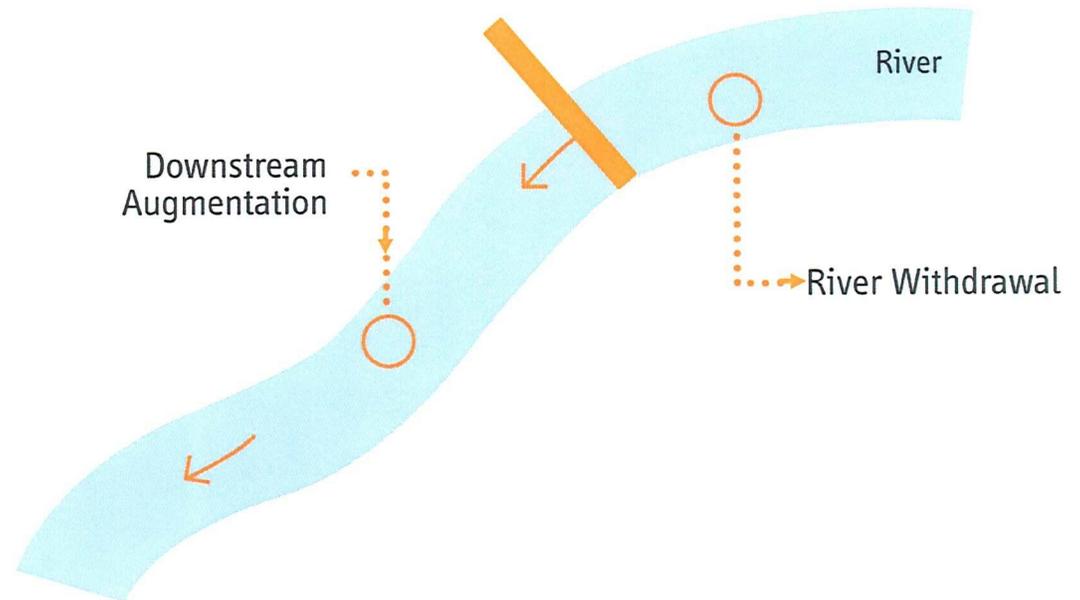


REGIONAL PARTNERS

- Tampa
- Hillsborough Co.
- SWFWMD
- Pasco County
- Tampa Bay Water



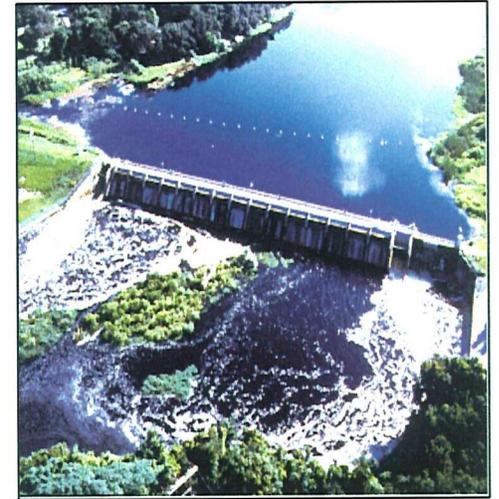
- **Gallon for gallon exchange**
- **Maintains fresh water flow to estuary**
- **Reclaimed water would not be used for drinking water**



- **Scientific studies:**
 - **Extensive environmental data review**
 - **Rigorous permitting process**
 - **Comprehensive water quality modeling**
 - **River Flows**
 - **Salinity**
 - **Temperature**
 - **Dissolved Oxygen**
 - **Nutrients**
 - **Water Quality**
- **Monitoring ongoing studies on personal care and pharmaceutical products:**
 - **Seven EPA studies**
 - **24 American Water Works Association Research Foundation projects**
 - **Comprehensive assessment by Water Reuse Foundation on Southwest Florida waterbodies and treatment facilities**



- *Maximizes reclaimed water use*
- *Meets region's drinking water needs through 2017*
- *Increases yield of the surface water system & reservoir*
- *Part of a larger regional reclaimed water plan*



Estimated cost: \$186 million for 13 mgd

- Southwest Florida Water Management District funding 50% of eligible capital costs***
- Congress and State have approved funding for Planning Phase***

- ***Need to meet projected water demand of 12 mgd by 2012***
- ***Candidate water supply projects must be***
 - ***Environmentally sound***
 - ***Economical***
 - ***Technically feasible***
- ***Long term need of 45 mgd by 2025 should be considered***

- ***Take input at public meeting and individual briefings***
- ***Present public input and technical review to the Tampa Bay Water Board in October***
- ***Expect Board to consider which project to pursue at their meeting***