

Alternatives to BCP Pumping Permit for ELW Golf Course

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I. Supply Side Strategies

A. Surface Water

1. Lake Tarpon

a) Pros:

- (1) existing reservoir
- (2) close proximity
- (3) viable storage option
- (4) water not brackish

b) Cons:

- (1) potential to affect lake levels
 - (a) *mitigation strategy: change control structure*
- (2) water may contain herbicide from hydrilla management
 - (a) *mitigation strategies*
 - (i) timing of water removal
 - (ii) upstream water collection

2. Stormwater

a) Pros:

- (1) eliminates non-point pollution source
- (2) limited collection/distribution area
- (3) minimal treatment required

b) Cons:

- (1) size of necessary reservoir prohibitive
- (2) unreliable source
- (3) pollutants

B. Groundwater

1. Site New Wells

a) Pros:

- (1) moves cone of influence outside of wetlands
- (2) can be sited near existing infrastructure (pipeline)
- (3) opportunity to reduce severity of impact by spreading it over a large area (more widely distributed wellpoints)

b) Cons:

- (1) infrastructure impacts/cost
- (2) limited suitable locations

2. On-Site Groundwater

a) Pros:

- (1) proximity reduces need for distributive infrastructure

b) Cons:

- (1) desalination required
 - (a) *mitigation strategy: use salt tolerant grass species*

C. Greywater

1. Golf Course Facility

a) Pros:

- (1) on-site availability
- (2) more reliable than storm/surface water
- (3) minimal treatment required

b) Cons:

- (1) collection/distribution infrastructure required
- (2) permissibility issues
- (3) negative public perception

2. Neighborhood

a) Pros:

- (1) on-site availability

- (2) more reliable than storm/surface water
 - (3) minimal treatment required
- b) Cons:**
 - (1) collection/distribution infrastructure required
 - (2) permissibility issues
 - (3) negative public perception
 - (4) neighborhood cooperation required
- 3. Reclaimed Water
 - a) Pros:**
 - (1) eliminates potential impact to BCP
 - (2) eliminates cost to reactivate wells
 - b) Cons:**
 - (1) places demand on scarce reclaimed resource
 - (2) increases reliance on potable water elsewhere

II. Demand Side Strategies:

A. Reduce Demand

- 1. Countywide Conservation -- Potable
 - a) Pros:**
 - (1) minimal per-capita reduction needed
 - (2) system-wide sustainable solution
 - b) Cons:**
 - (1) corresponding reduction in reclaimed generation
 - (2) increases demand on reclaimed
- 2. Countywide Conservation -- Reclaimed
 - a) Pros:**
 - (1) minimal per-capita reduction needed
 - (2) system-wide, sustainable solution
- 3. Golf Course Management
 - a) Pros:**
 - (1) sustainable solution
 - (2) cumulative educational opportunity
 - (3) more flexible/customizable solution
 - (4) focused area of change
 - b) Cons:**
 - (1) savings to be realized may be minimal
 - (2) scope of benefit is limited
 - (3) cost of management changes may be prohibitive

B. Eliminate Need

- 1. Close Golf Course
 - a) Pros:**
 - (1) eliminates demand on reclaimed supply
 - b) Cons:**
 - (1) replacement development may be even more consumptive
- 2. Eliminate Irrigation
 - a) Pros:**
 - (1) eliminates demand on reclaimed supply
 - b) Cons:**
 - (1) aesthetic considerations with potential for corresponding loss of income
 - (2) cost of sod replacement
 - (3) increased erosion
 - (4) higher demand for fertilizer/pesticides