

A stylized map of the state of Florida is positioned on the right side of the slide, partially overlapping a dark horizontal bar. The map is rendered in a light beige color with a slightly pixelated or blocky appearance.

## **Lower West Coast Partnering Session**

Ricardo A. Valera, P.E.

Lower West Coast Regulatory Division Director

# Post Permit Compliance

Kenneth W. Kellum, P.E.

Engineer Supervisor



# Agenda

- **Post Permit Compliance requirements for Environmental Resource Permits**
  - Pre-Construction Requirements
  - Construction Completion Certifications
  - Environmental Maintenance and Monitoring
  - Conversion and Transfer of Permits to the Operation Phase
  
- **Future Topics of Discussion**



## Overview

- **Once the Permit is issued ...**
  - **Notice of Commencement**
  - **Conservation Easements need to be recorded**
  - **Financial Assurance documents submitted**
  - **Proof of Purchase of Mitigation Credits**
  - **Schedule a Pre-Construction Meeting**
  - **Maintenance and Monitoring**
  - **Post Construction – it isn't finished until all the paperwork is done!**
  - **Notification of change of ownership**



## After Permit Issuance



- If the approved design is changed as a result of requirements of another agency, a permit modification is required prior to the commencement of construction activities.
- The permittee shall notify the District of the anticipated construction start date within 30 days of the date that the permit is issued.
- At least 48 hours prior to commencement of activity authorized by the permit, the permittee shall submit to the District an Environmental Resource Permit Construction Commencement Notice Form Number 0960 indicating the actual start date and the expected construction completion date.

## After Permit Issuance



- When the duration of construction will exceed one year, the permittee shall submit construction status reports to the District on an annual basis utilizing an annual status report form.
- A copy of the permit, complete with all conditions, attachments, exhibits, and modifications shall be kept at the work site of the permitted activity and shall be available for review upon request by District staff.



## Pre-Construction - Environmental

### 90-Days After Permit Issued and Prior to Construction

- **Conservation Areas**
  - **Record Conservation Easements**
    - **Submit Original or Certified Copies**
    - **Sketch and Descriptions, CD with acreage listed**
    - **GPS coordinates – Text File, Lat/Long in Decimal Degrees**
    - **GIS – Needs to be projected in the East Zone**



## Pre-Construction - Environmental

### 90-Days After Permit Issued and Prior to Wetland Impacts

- **Financial Assurances**
  - Original Letter of Credit, Performance Bond, or Escrow Agreement
  - Current Contact Information
- **Proof of purchase for off-site mitigation credits**
- **Baseline Monitoring Report**
- **Schedule Staking and Roping *Prior* to installation of silt fence**



# Pre-Construction Meeting



## Schedule a Pre-Construction Meeting with District Staff

- Meeting should include Engineering, Environmental, and Water Use staff
- Detailed Discussion:
  - Endangered or Threatened Species
  - Mitigation Procedures
    - Mechanical Removal
      - Limits & method
    - Planting requirements, scheduling
  - Impacts to wetlands due to:
    - Spreader swales
    - Control structures

# Pre-Construction Meeting



## Schedule a Pre-Construction Meeting with District Staff

### ▪ Detailed Discussion:

- Implementation of Best Management Practices for Erosion and Pollution Control
- Installation and Maintenance of Silt Fences and Turbidity Barriers
- Review Construction Pollution Prevention Plan
- Dewatering Operations
  - Keep surface water & dewatering effluent separate
- Off-Site Flow Bypass Plan
- Phasing Plan for Construction of the SWM system
  
- Post Copies of the Permit

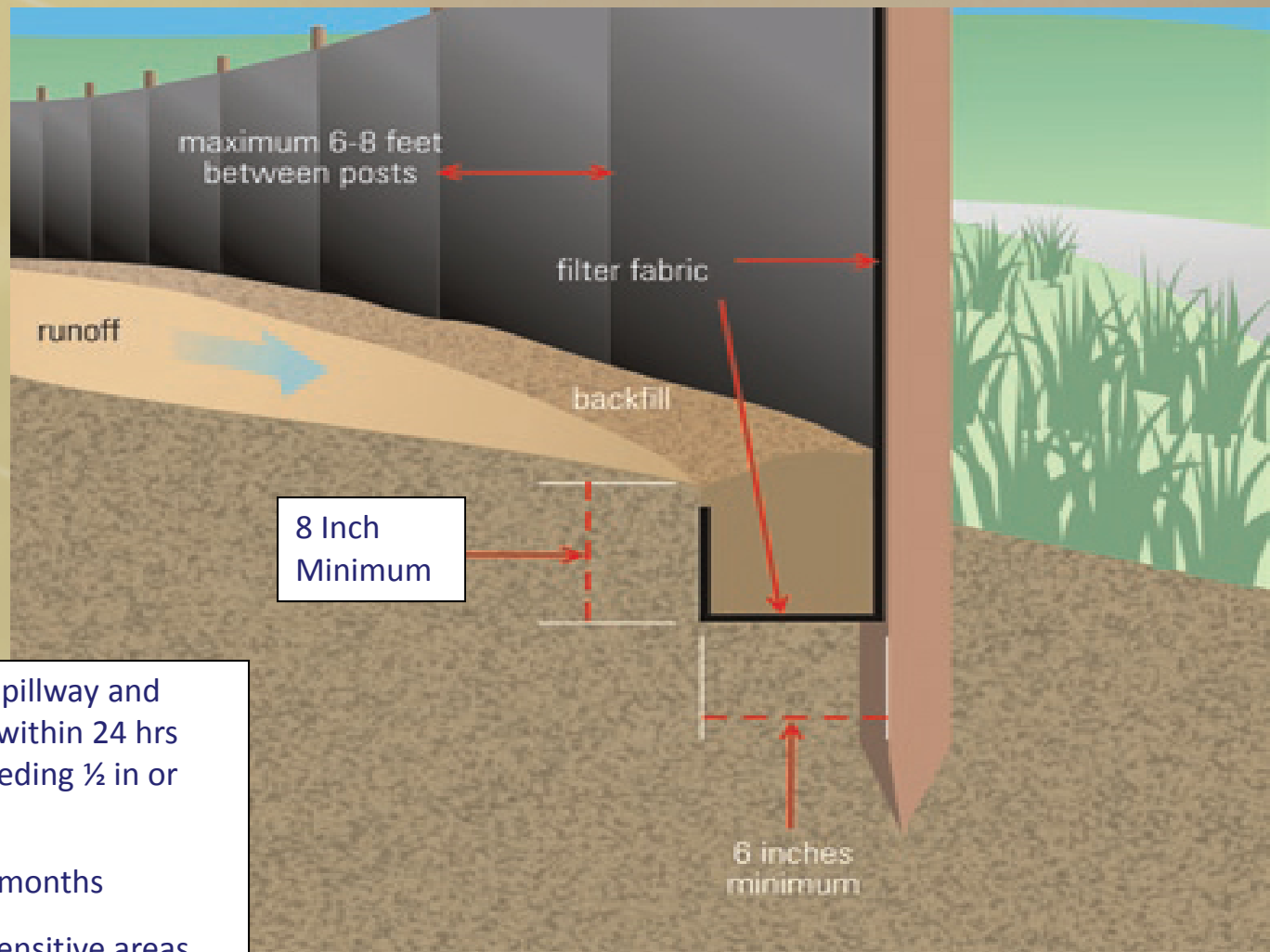
## During Construction



- **Ensure there are no unauthorized impacts to conservation areas and wetlands**
- **Maintain BMP's per the Construction Pollution Prevention Plan & Permit**
- **Annual Reports**
- **Stabilize perimeters & lake slopes**
- **If necessary to make changes during construction, please contact District staff**



Wrap posts together when joining fencing



Inspect inlets, berms, spillway and outlet area for erosion within 24 hrs after each rainfall exceeding ½ in or weekly.

Expected to last only 6 months

Use double fencing in sensitive areas , space 3 ft between rows





**Poor BMP's**

Adjacent to mechanically cleared preserve



**No Silt Fences!**

Silt fences must be installed prior to construction beginning





## BMP's Best Management Practice's



Culverts Blocked



Silt fences not trenched





# BMP'S Best Management Practice's



Construction road blocking Flow-way



Silt fences installed properly but Flow-way blocked





# Silt Fence Issues



Silt fence not trenched

Silt fence breach





# Turbidity



Attempt to control turbidity  
blocked flow



Silt fence not continuous





# Turbidity







# Turbidity





## Off Site Flows



Blocked off site flows  
along a dewatering trench







# Blow Out



DEC/18/2009



# Blow Out







# Breached Berm







# Unknown hose/discharge to drain





# Turbidity Discharge



15/AUG/2007



## Silt Run-off into Mangroves



## No BMP's in place for pumping







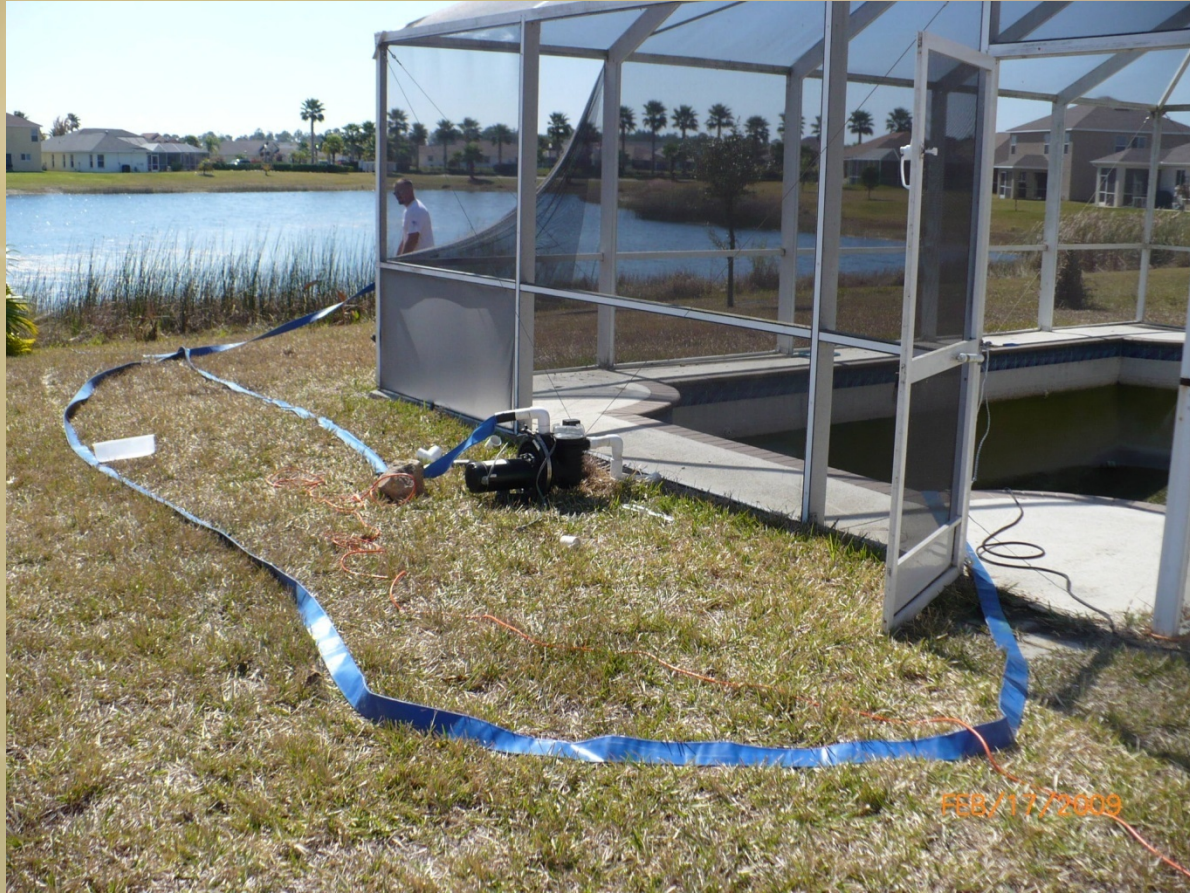
# Dewatering







# Discharge of Pool Water







# Discharge from Dumpster Enclosure







# Offsite Flow Impacts



Construction Blocked Flow and Changed Flow Direction





## Clearing Preserve Areas

Clearing of native vegetation in Preserve Areas is not permitted







# Excessive Clearing





## CONSTRUCTION COMPLETE ... Engineering

- **Engineering Certification Completion must be submitted on the correct Form**

- Form 0881A (projects permitted after to Oct 3, 1995)
- Form 0881B (projects permitted prior Oct 3, 1995)
  - Sign and Seal the certification – by a FL licensed PE
  - List all relevant Application Numbers
  - List all major control structures dimensions and elevations - Named as per plans
  - List all retention/detention areas size and slope data
  - List location of the benchmark (on or within 100 feet of the control structure)

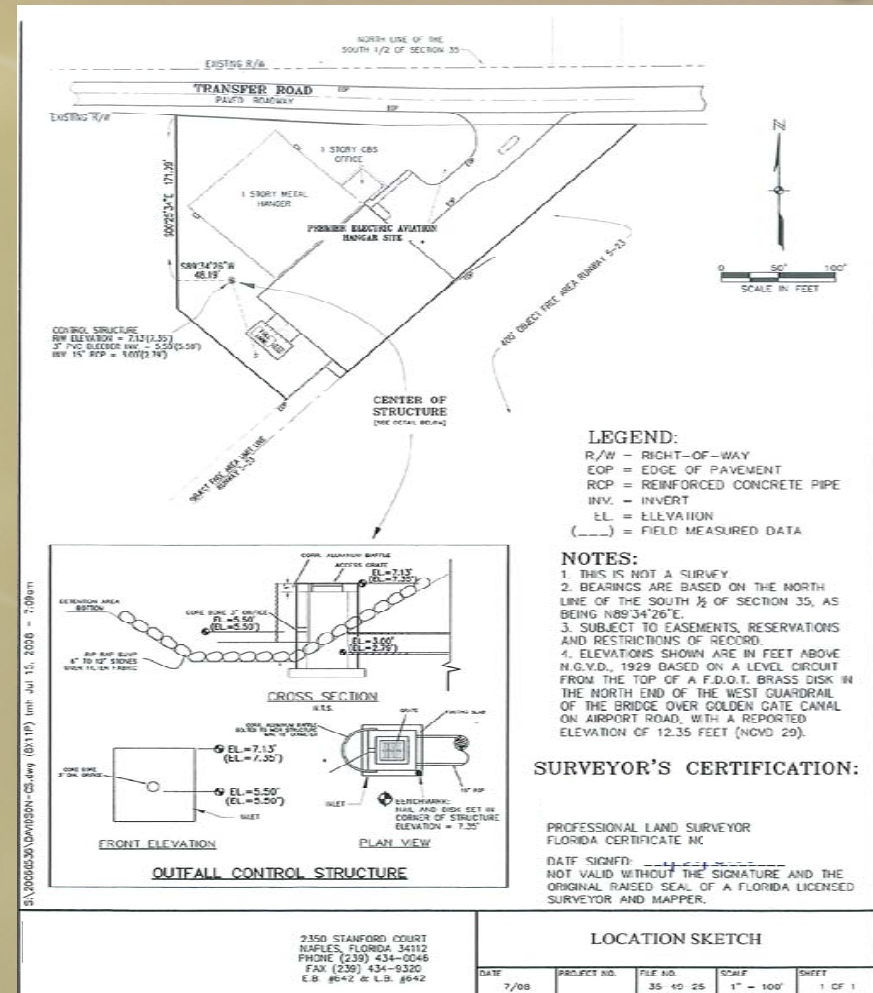


### **Must be submitted within 30-days of SWM system completion**

- Include signed and sealed 'As-Built' plans reflecting significant changes to the project
  - Changes to the volume of retention/detention areas will require calculations proving enough water quality is provided
  - Major changes require a modification to the permit
  - Surveyed dimensions and elevations may be certified by a Registered Surveyor

# Location and Description of Benchmark

- A stable, permanent and accessible elevation reference (benchmark) shall be established on or within one hundred (100) feet of all permitted discharge structures
- All structures, including water quality structures for dry detention areas, should be included as part of the certification regardless of whether they are specifically noted in the special conditions or staff report of the permit
- Benchmark elevation cannot be obtained by utilizing the minimum permitted finish floor elevation of the building





# Construction Inspection Tolerance Guidelines

ITEM	GENERAL TOLERANCE GUIDELINES
<b>BLEEDER</b> <ul style="list-style-type: none"> <li>Invert Elevation</li> <li>Cross-sectional Area</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.15</math> FT</li> <li><math>\pm 10\%</math></li> </ul>
<b>OUTFALL CULVERT</b> <ul style="list-style-type: none"> <li>Upstream Invert Elevation</li> <li>Downstream Invert Elevation</li> <li>Height</li> <li>Diameter</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.2</math> FT</li> <li><math>\leq</math> Upstream Invert Elevation</li> <li>No tolerance</li> <li><math>\pm 10\%</math></li> </ul>
<b>DROP INLET</b> <ul style="list-style-type: none"> <li>Crest Elevation</li> <li>Width</li> <li>Diameter</li> <li>Length</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.2</math> FT</li> <li><math>\pm 10\%</math></li> <li><math>\pm 10\%</math></li> <li><math>\pm 10\%</math></li> </ul>
<b>SLIDE GATE</b> <ul style="list-style-type: none"> <li>Invert Elevation</li> <li>Crest Elevation</li> <li>Width</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.2</math> FT</li> <li>(Cross-sectional area shall be <math>\pm 10\%</math>)</li> </ul>
<b>WEIR</b> <ul style="list-style-type: none"> <li>Crest elevation</li> <li>Length</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.2</math> FT</li> <li><math>\pm 0.2</math> FT</li> </ul>
<b>PUMPS</b> <ul style="list-style-type: none"> <li>"On" elevation</li> <li>"Off" elevation</li> <li>Capacity</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.2</math> FT</li> <li><math>\pm 0.2</math> FT</li> <li>No tolerance</li> </ul>
<b>GOLF COURSE SWALES</b> <ul style="list-style-type: none"> <li>Width</li> <li>Depth</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 0.5</math> FT, or 10%</li> <li><math>\pm 0.5</math> FT, or 10%</li> </ul>
<b>EXTERNAL DITCHES</b> <ul style="list-style-type: none"> <li>Top Width</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 1</math> FT</li> </ul>
<b>DIKE SLOPES</b> <ul style="list-style-type: none"> <li>Steeper than 4H:1V</li> </ul>	<ul style="list-style-type: none"> <li><math>\pm 10\%</math></li> </ul>
<b>SWM LAKES</b> <ul style="list-style-type: none"> <li>Area</li> <li>Side slopes: 4H:1V 5H:1V 6H:1V</li> </ul>	<ul style="list-style-type: none"> <li>N/A (at this time)</li> <li>3.5H:1V or shallower</li> <li>4.5H:1V or shallower</li> <li>5.5H:1V or shallower</li> </ul> <p>*Note: Step(s) or drop(s) near shoreline should not exceed 9 inches.</p>

## Common Certification Deficiencies



- Not including a benchmark on or within 100-ft of the control structure
- Not including all of the appropriate application numbers
- Marking “Conveyance Only” when not appropriate
- Incorrect Bleeder dimensions
- Not including As-Built plans when there are modifications
- When submitting a Partial Certification, not including a site plan that shows the portion of the project being certified.
- Submitting a “Full” certification when only doing a Partial Certification
- Changing nomenclature of structures





# Control Structure



Inlet blocked

No sump around the structure face  
– Detention Area filled in





## Control Structure Location

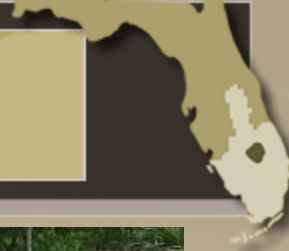


Consider location of structures for maintenance

Better location - on the side slope







# Control Structures



Not Acceptable



Acceptable







# Control Structures

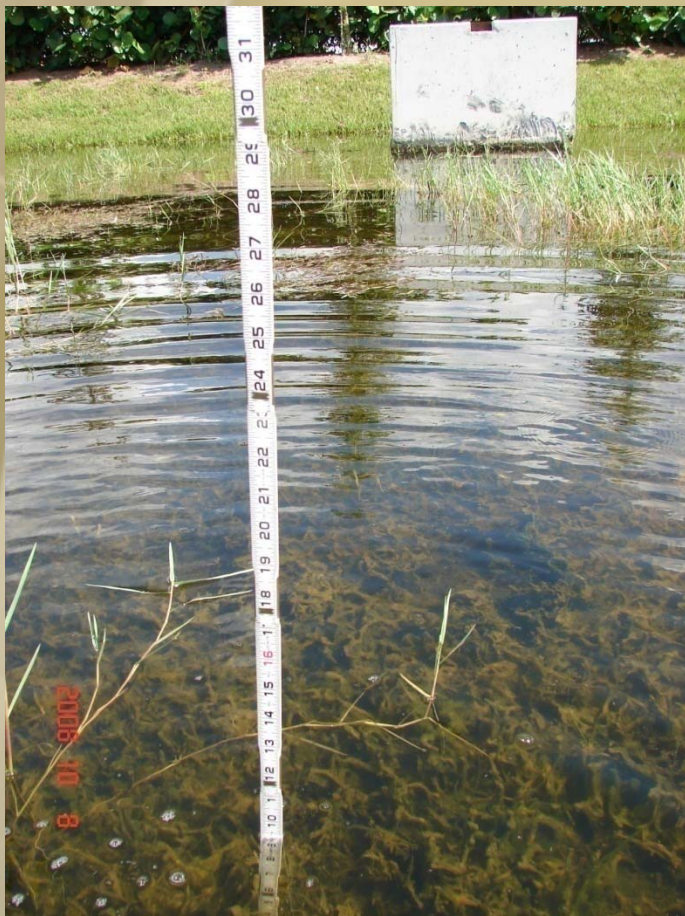


Top View

Overgrown vegetation surrounding the structure and no trash baffle



# Dry Detention



Not in Tolerance



Possible Issues:

- Bleeder too high
- Detention bottom too low
- Incorrect assumption – tail water condition and/or high season water table

Within Tolerance



## Certification of Projects



Sediment should be removed when system complete prior to requesting certification acceptance







# Lake Slopes



Not a 4:1 slope  
Requires maintenance

Slope looks good but will degrade over time if not stabilized







## Lake Side Slope Littoral Plantings



Stabilization  
alternative to sod





# Well Maintained & Acceptable Slopes







# Partial Certification... Engineering Not Acceptable

Yarn drain not protected



Preserve



Preserve Sign



Temporary silt fence while construction of individual lots.



# Partial Certification... Engineering Acceptable



Silt fence and temporary diversion berm



Hydroseeded and sod along curb gutter



Perimeter berm stabilized and sodded



Conveyance swale sodded

# Environmental Monitoring



- **Monitoring requirements must be met**
  - Submittal of annual monitoring reports per monitoring schedule
  - 5 years of monitoring is typical; but can vary and be extended
  - Special conditions of permit are met
  - Visible and Permanent Signage for Conservation Areas
  - Structural buffers installed
  - No un-permitted discharges into preserve areas



# Environmental Monitoring



- **Exotic and Nuisance Plant Maintenance**
  - Must stay within permitted threshold
  - Quarterly for 1<sup>st</sup> ~ 2<sup>nd</sup> years
  - Annual / Semi-Annual thereafter
- **Periodic release of monies based on mitigation completion & release (based on success rate)**
  - 35% ~ Time Zero
  - 15% ~ 2<sup>nd</sup> Annual
  - 50% ~ After Sign-off

## What we see the most ... in Preserve Areas



- Hammock and exotic landscape plantings in the preserve
- Recreational artifacts and landscaping are not permitted in preserves



# Structural Buffers



Do not cut down the structural buffer to create a dead zone

Structural buffer consisting of a native hedge was removed; signs are missing







Encroachment of the preserve for playgrounds; enlarging or beautifying yards are not allowed; preserve areas should be clearly marked

Verbiage related to preserves and their usage should be specified in the Association Docs







## **Final Environmental Sign-off** **What we generally look for is...**

- **First, the special conditions of the permit should be fully satisfied**
- **Second, is everything turned in?**
  - **Conservation easement, mitigation bank documents, monitoring reports, etc.**
- **Third, District staff make a site inspection. During this inspection, some of the questions we ask are:**
  - **Has the hydrology of the preserve been maintained?**
  - **Is exotic coverage less than 5%?**
  - **Are all mitigation plantings healthy and meeting the general 80% coverage/survivorship?**
  - **Is the overall coverage of native plants at least 80%?**
  - **Are there any encroachments into buffer areas or preserve areas?**
  - **What is the long-term maintenance plan?**

## What if the preserves don't meet the requirements for sign-off?



- The District will work with you to help you get on the right track
- Depending on the issue, resolution could be very quick and simple or may take extra time
  - Usually by the end of the monitoring, if the project has maintained compliance all along, the “fix” is easy
- Some of the things we may require are:
  - Extra mitigation plantings in the preserve
  - Additional monitoring
  - Additional exotic maintenance event(s)





# Preserve Monitoring



Preserve invaded by melaleuca seedlings

Planted preserve area still has some exotics



## It's all good... Now what?



- Final sign-off involves a letter written by District environmental staff saying the project has met the environmental conditions of the permit and is in compliance
  - If there is a financial assurance for the development, then it will be fully released at this time
  - After final sign-off, we do not require any more monitoring reports for the preserves
  
- But it doesn't end there, because the District will make periodic post-compliance inspections. We check to make sure the preserve is still being maintained
  - *Perpetuity means forever*

\* Remember, this sign-off is only for the environmental aspects of the project, and is separate from the engineering sign-off





## Recap / What to do & When

- 30-days after Permit is issued
  - Submit (Form 0960) Construction Commencement Notice
- 90-days after Permit is issued or prior to any wetland impacts
  - Submit recorded certified conservation easements
  - Mitigation Credits
- Prior to the start of Construction
  - 2 ~ 3 weeks prior, schedule a pre-construction meeting
  - Staking & Roping, schedule prior to the installation of silt screens
  - Dewatering Permit if needed



## Recap / Cont'd

- Annually
  - Submit monitoring reports
  - Annual Construction Status Report (Form 0961)
- System Completion
  - Within 30-days submit (Form 0881) Construction Completion Certification
    - Include benchmarks and as-builts; if required





## TRANSFERS – Ownership Change

Are to be requested within 30-days of sale/transfer

- Recorded copy of documents re: transfer of ownership (deeds)
- Project or boundary map (not property appraiser sheet)
- SWMS transfer (\$675.00) / WU transfer (\$300)
- Form 0483 to be submitted to:

SFWMD

Attn: John Pfaff

3301 Gun Club Rd

West Palm Beach, FL 33406

800-248-1201 ext 6741

[jpfaff@sfwmd.gov](mailto:jpfaff@sfwmd.gov)

See our website for the most current information

- <http://www.sfwmd.gov>



## Change of Operating Entity – Letter Mod

### Operating Entity

- Was undetermined when permitted
- Changed since originally considered

A letter mod can be requested to change the operating entity – the operating entity shall be .....

- \$250.00 no other changes are to be made
- Conversion/Transfer request still pursued





## Conversion/Transfer from Construction to Operation

- Initiate (Form 0920) to transfer the Permit to HOA / POA / CDD
  - Developer / Applicant normally responsible for document preparation and submittal
  - Documents are reviewed and a conversion / transfer letter is issued which will transfer responsibility from the Developer / Applicant to the HOA / POA / CDD
- All information required is to be submitted to:

SFWMD / LWCSC

Attn: Karen Adams

2301 McGregor Blvd

Fort Myers, FL 33901

239-338-2929 x7779

## Conversion/Transfers - (Developer to HOA/POA)



- Request within 30 days of Acceptance of Construction Completion
  - Form 0920 – to be signed by officer or director for the HOA/POA
  - Affidavit – to be completed, signed and notarized
  - Recorded copies of
    - Declarations, Amendments, Exhibits, Agreements, Deeds
    - All plats
    - A copy of Permit is to be recorded as an Exhibit to the Declarations or a Public Noticing of the Permit is to be recorded
- Filed Articles of Incorporation; Certification of Incorporation (w/FL seal)
- If the system is shared with another entity a joint agreement between the two must be recorded and submitted – regarding responsibility, maintenance, etc
- If monitoring is not complete – ensure that provisions are made for the developer to complete the monitoring requirements by including financial assurance





## Conversion/Transfers - Documentation for CDD's

- Requires all documentation for the HOA/POA Declarations, Articles, etc .....
- Form 0920 signed by the CDD Supervisor, Chairman or other Officer
  - To include documentation of their position/signature authority.
- Copies of the
  - Recorded Plats, Deeds or Easements that document the CDD has maintenance responsibility for the SWMS
  - Ordinance establishing the CDD, pursuant to Chapter 190, FL Statutes
- Notarized statement that the CDD meets all the requirements of Chapter 190, FL Stat within the ordinance (Affidavit is not applicable but can be used as a checklist)
- Dedication from the POA to CDD (includes all easements)
- POA's will remain owner's of the common areas, but easements for the SWM system need to be referred to in the Plats
- Normally a CDD conversion/transfer is not done until the master system is certified and accepted (done by case by case basis)



## Phased Project; Golf Course?

- Is there a golf course associated with project?
  - They should be a member of the association
  - Drainage/maint easements for cross drainage; ingress and egress for maintenance
- Phased
  - Phases can function independent of each other
  - There should be a master who is responsible for the overall maintenance and conservation areas



## Desire Early Turnover of SFWMD Permit



- Project should be certified and accepted (SWMS; backbone) not necessarily built-out
- Verbiage must be in documents to support the association is responsible to provide monitoring and maintenance of conservation areas
- Turnover of SFWMD Permit is not the same as turnover from developer to property owner's
- Can be accomplished with Developer's Board overseeing Association



# Drainage Easements

- Why they are needed....
  - The ability to drain surface water across the property of another
  - SWMS will be jointly owned
- They must be
  - Recordable, perpetual, allow ingress/egress for maintenance and repair, requires SFWMD notification prior to an amendment
  - Easement Deed; Plats; Deed Restrictions
- 20-ft maintenance easement around lakes





## Conservation Areas / Wetlands

- Wetlands and Buffers should be dedicated as Conservation Easements (CE)
- Their use should be restricted in the association docs & plats
- If early turnover is desired – prior to the developer completing 5+ years of monitoring
  - Verbiage for association to complete monitoring must be found in documents
  - An agreement that the developer will complete the monitoring with temporary easements can also be accepted



## Contacts - Permitting

### ENGINEERING SUPV

- TBD
- 338-2929

### ENVIRONMENTAL SUPV

- Laura Layman
  - 338-2929 x7725
  - [llayman@sfwmd.gov](mailto:llayman@sfwmd.gov)

### GENERAL PERMITTING INFO

- Susan Milburn
  - 338-2929 x7782
  - [smilburn@sfwmd.gov](mailto:smilburn@sfwmd.gov)

### WATER USE SUPV

- Bill Foley, PE
  - 338-2929 x7728
  - [bfoley@sfwmd.gov](mailto:bfoley@sfwmd.gov)



## Contacts – Post Permit Compliance

### SUPERVISORS

- Mark White
  - 338-2929 x 7765
  - [mwhite@sfwmd.gov](mailto:mwhite@sfwmd.gov)
- Ken Kellum, PE
  - 339-2929 x7793
  - [kkellum@sfwmd.gov](mailto:kkellum@sfwmd.gov)

### ENFORCEMENT

- Melissa Roberts, PE
  - 338-2929 x7795
  - [mroberts@sfwmd.gov](mailto:mroberts@sfwmd.gov)

### RECORDS

- Pat McGary
  - 338-2929 x7757
  - [pmcgary@sfwmd.gov](mailto:pmcgary@sfwmd.gov)

### ENGINEERS

- Angelica Sotomayor  
(Collier)
  - 338-2929 x7731
  - [asotomay@sfwmd.gov](mailto:asotomay@sfwmd.gov)
- Becky Reide, PE  
(Charlotte, Hendry & Lee)
  - 338-2929 x7760
  - [breide@sfwmd.gov](mailto:breide@sfwmd.gov)

### TRANSFERS

(Conversions & General Info)

- Karen Adams
  - 338-2929 x7779
  - [kmadams@sfwmd.gov](mailto:kmadams@sfwmd.gov)



## Contacts – Compliance Cont'd

### ENVIRONMENTAL

- Marie Dessources  
(Lee)

338-2929 x7731

- [mdessour@sfwmd.gov](mailto:mdessour@sfwmd.gov)

Hal Herbst

(Charlotte & Hendry)

- 338-2929 x7742

- [hherbst@sfwmd.gov](mailto:hherbst@sfwmd.gov)

Roxanne Clifton

(Collier)

- 338-2929 x7717

- [rclifton@sfwmd.gov](mailto:rclifton@sfwmd.gov)

### REGULATORY PROFESSIONALS

- Louis Hunter

(N & W Lee, Charlotte)

- 338-2929 x7792

- [lwhunter@sfwmd.gov](mailto:lwhunter@sfwmd.gov)

- Steve Nagle

(Collier)

- 338-2929 x7721

- [snagle@sfwmd.gov](mailto:snagle@sfwmd.gov)

- Bobby Pearce

(E & S Lee, Hendry)

- 338-2929 x7773

- [rpearce@sfwmd.gov](mailto:rpearce@sfwmd.gov)





## eSubmittals



Username: kmadams

[Home](#) | [Logout](#) | [Application/Permit Search](#) | [Help](#)**Environmental  
Resource Permit  
Compliance**

Submittal #: 70161

Submittal Status: New

ERP Compliance

Compliance Management

Application Number: 070403-5 ?

Permit Number: 36-06026-P ?

Project Name: CORKSCREW RANCH ?

Comments:

Please select the deliverables for which you are submitting information. All deliverables previously submitted will continue to show as outstanding until officially accepted by the South Florida Water Management District.

 **Engineering Deliverables** ? ANNUAL CONSTRUCTION STATUS  
Due Date: 06/21/2008 OPER POA  
Due Date: 07/06/2007 CONVERSION/TRANSFER  
Due Date: 09/10/2007 CONSTRUCTION COMMENCEMENT NOTICE  
Due Date: 07/22/2007 **Environmental Deliverables** ?

## **Lower West Coast Partnering Session**

### **■ Presentation**

- **Presentation will be posted on the District's website and will be available to download**

### **■ UMAM Training**

- **Miami-Dade – December 2, 2010**
- **Florida Keys -- 2011**
- **Please Contact Laura Layman if you have questions or check the District's website**

### **■ Next Regulatory Partnering Session**

- **March 2011 – Water Use**
- **Please fill out the survey with topics you are interested in discussing at future meetings**





# Post Permit Compliance

Questions?

