# Collier County Watershed Management Plans





### Conundrum of Our Current Situation



Trying to fix major problems with the foundation - when the drywall is about to be hung.





# Foundation Problem 1: WMPS Not Adhering to FDEP and EPA Water Quality Assessments

- FDEP determines and classifies impairment and whether it is believed to be the result of a natural pollutant source
- EPA reviews and approves. Fed. Regs. require waterbodies exceeding state standards to be listed as "impaired" unless proven to have no anthropogenic pollution.
- Watershed plan development has reassessed determinations of impairment rather than designing management plans based upon state and federal classifications.



# County Watershed Management Plan Technical Memorandums

- Technical memorandums include a reassessment of FDEP impairment determinations
- Natural causes were often indicated as the source of pollutants and original memos requested site specific alternative criteria
- At the Conservancy's request, Collier County has made an effort to revise some memos
- However, three important memos have yet to be revised: element 4 task 1, element 4 task 3 (Gordon River and Lake Trafford)



### Water Quality Regulation

**Designated Use** 

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Water Quality Standard\*

**↓** 

**Not Meeting It** 

**Meeting It** 



If "impaired" → then Total Maximum Daily Load\* Set

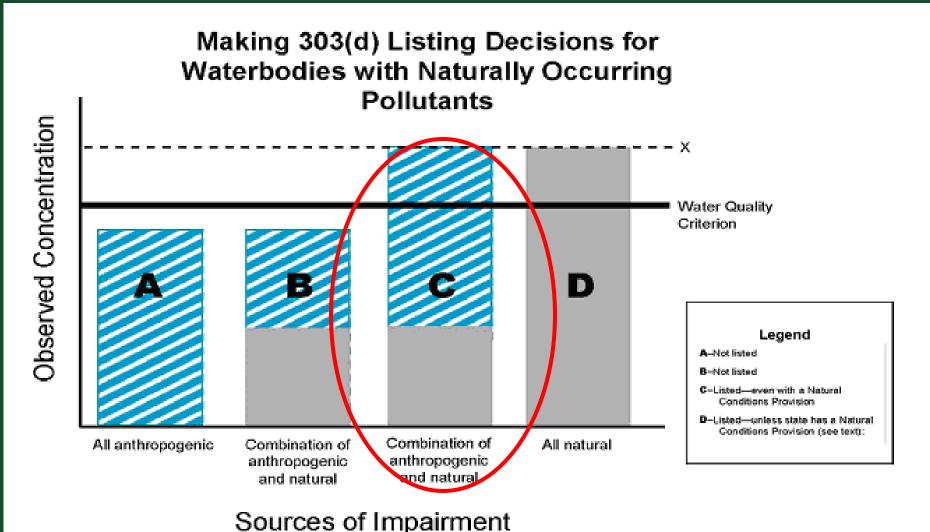


To meet TMDL, Basin Management Action Plan Created



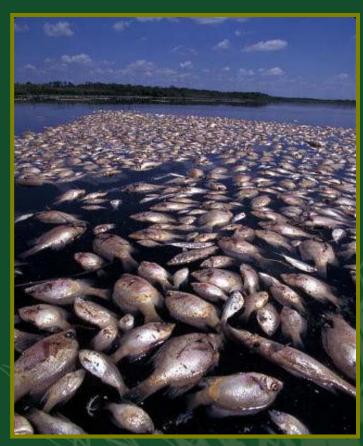
\* Accounts for natural pollution loading

The EPA guidance figure below illustrates that unless pollutant concentrations are *solely* linked to natural sources, a TMDL must be completed for that waterbody.



### Disputes Dissolved Oxygen Impairments

- Due to a "natural" site within Collier County also exhibiting levels of DO below state standards.
  - reference site listed by FDEP as impaired for DO as well.
- FDEP has not indicated that the impairment is thought to be from natural pollutant sources
- Most likely from runoff from upstream residential and agricultural areas.



Thousands dead fish due to nutrientladen run-off. Lake Trafford, Florida



### Recommends County-wide DO Deviations



Thousands dead fish due to nutrient-laden run-off. Lake Parker, Florida

Lack of scientific justification required for such DO deviations to be granted throughout the County.

The Watershed Management Plans should focus on reducing the anthropogenic inputs of pollutants which depress DO levels.



### Disputes Salinity Characterization

- FDEP with Collier County's participation recently went through an extensive re-delineation process just a couple years ago
- WBIDs assessed as potentially marine failed water quality standards for DO either way.
- The Watershed Management Plans should therefore utilize FDEP basin boundaries to ensure consistency and compatibility.



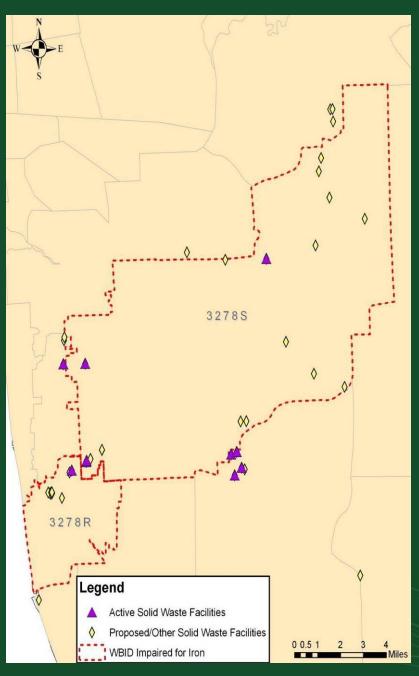
### Disputes Iron Impairments



- Watershed Management Plan document suggests iron impairments are natural.
- Unless there is sufficient scientific evidence that the iron exceedance is entirely natural and a deviation is granted, with the waterbody delisted by FDEP – the legal requirement is to meet current state iron water quality standards.



#### **Solid Waste Facilities in Collier County**



- Conservancy's cursory analysis shows at least one potential non-natural source of iron within WBIDs impaired for iron - active solid waste facilities (shown on the map to left).
- The Watershed Management Plans should instead work towards assessing measures necessary to meet state iron water quality standards.

#### Watershed Management Plans (WMP)

- will not adequately address water quality impairments based FDEP's impaired waters lists and Total Maximum Daily Loads (TMDLs) already completed within the county.
- are not designed to isolate and assign specific pollutant / wasteload allocation reductions as a BMAP
- are not being developed across geopolitical boundaries with the participation of all affected stakeholder groups who would be required for their successful implementation - such as the County, City of Naples, City of Marco, etc. in the case of Collier County.

 do not have a compliance instrument with the same level of binding and enforceable measures necessary to fulfill the requirements he BMAP, which are adopted by Secretarial Order to be enforceable.



The Watershed Management Plans should be focused as on evaluating land use changes to reduce impacts to water resources with regards to wetlands loss, or changes in quantity, timing or distribution of flows – <u>as well as be complimentary</u> to existing and future TMDLs and BMAPs.











## Current Status of Addressing Water Quality Problems

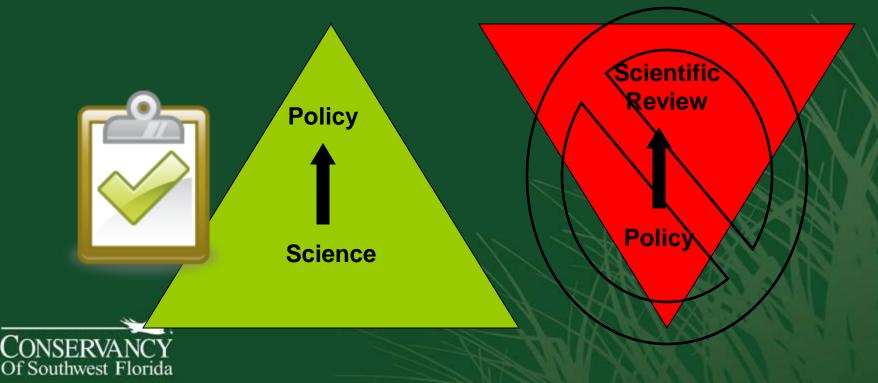
- Technical memos still challenge current FDEP and EPA assessments instead of being revised to focus on compliance instead.
- Conservancy sent letter to staff in 2007\* indicating that number 1 out of 10 prioritized outcomes we were seeking from these plans was "Water Quality Restored to Current State Water Quality Standards".
- Now, with only a few months until plan completions

   have no assurances that identified water quality
   problems are being targeted for remedy in these
   plans other than nutrients.



# Foundation Problem #2: Methodology Should Drive Project Selection

 Performance measures are being used to evaluate pre-determined projects - instead of using science (hydrology, LSI, etc.) to identify and select projects.



# Foundation Problem #3: Focusing On Present Hydrology Overlooks Restoration Opportunities

Agricultural lands have altered hydrology but many are within historical flowways that could benefit from restoration





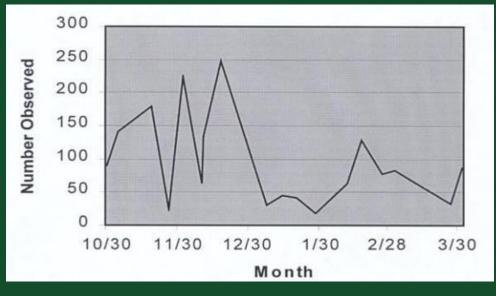
# Foundation Problem #4: Undervalues Natural Resource Value of Agricultural Lands

- Large agricultural areas (both row crops and pasture)
  have been identified as primary panther habitat-lands
  currently utilized and essential to maintaining a
  sustainable population of this endangered species.
- Row crops 4 and pasture is 6...which is supposed to address this with pasture being more valuable to listed wildlife. Both can be primary panther habitat.
- This approach has some primary habitat ag. lands as having no ecological value. (map labels only as agriculturally supportive)

Southwest Florida

## Wetland Dependent Species like Wading Birds...





Other wading bird species such as egrets, herons, ibises, and roseate spoonbills also make use of the shallow waters that collect on *agriculture fields* and nearby ditches for feeding



Species	Count	%	Listed Status	Agency
Cattle Egret	410	25		
Great Egret	392	24		
Snowy Egret	238	15	Species of Special Concern	State
Wood Stork	193	12	Endangered	State, Fed.
White Ibis	172	11	Species of Special Concern	State
Little Blue Heron	114	7	Species of Special Concern	State
Great Blue Heron	41	3		
Roseate Spoonbill	19	1	Species of Special Concem Under Review	State, Fed.
Tri-colored Heron	19	1		
Sandhill Crane	13	1	Threatened	State
Glossy Ibis	8	0		
Green-backed Heron	4	0		
Total	1619	100		

## Current Status of Vegetative/Wildlife Scoring

- Have been told this is being redone by staff
- Recent technical memo from consultants indicates that this has been eliminated from the natural systems score (leaving only the LSI and hydrology scores to be averaged for overall natural resource value).
- Again, this assessment approach will
  - not reflect the wildlife value of agricultural lands
  - result in key wildlife habitat restoration opportunities being undervalued - since it only looks at present condition
    - Example of Project That Could Be Overlooked:
       preservation of a key wildlife movement corridors that include non-natural lands.

## Consultant Driving Policy Rather Than County and Public Stakeholders

#### Example of embedded consultant-driven policy:

- County policy states preference for non-structural (natural) versus structural (engineering) best management practices and solutions
- Watershed Management Plan technical documents indicate both are equally considered with no preference – except to assess which are least costly.
  - > This will change what alternatives are selected in a way that is inconsistent with current policy, and outside the public process.



## Disproportionate emphasis on First Few Tasks to Detriment of Others

#### After 2 years, only first few tasks complete...

- ✓ Task 1: Assessment of Existing Conditions of the Watersheds
- ✓ Task 2: Assessment of Existing Conditions of the Estuaries
- ✓ Task 3: Development of Performance Measures
- ✓ Task 4: Analysis of Alternatives and Recommendations
- ✓ Task 5: Public Involvement / Public Meetings
- x Task 6: Watershed Management Plan Reports
- x Task 7: Project Management and Meetings



### **A Solid Foundation**

We need to be able to build a solid foundation with adequate stakeholder input to ensure effective plans – and that is going to take more







#### **Conclusion**

The Conservancy appreciates the work the County has done so far and requests that the County continue to revise the technical documents to remove suggestions of site specific alternative criteria where a natural impairment has not been proven.



