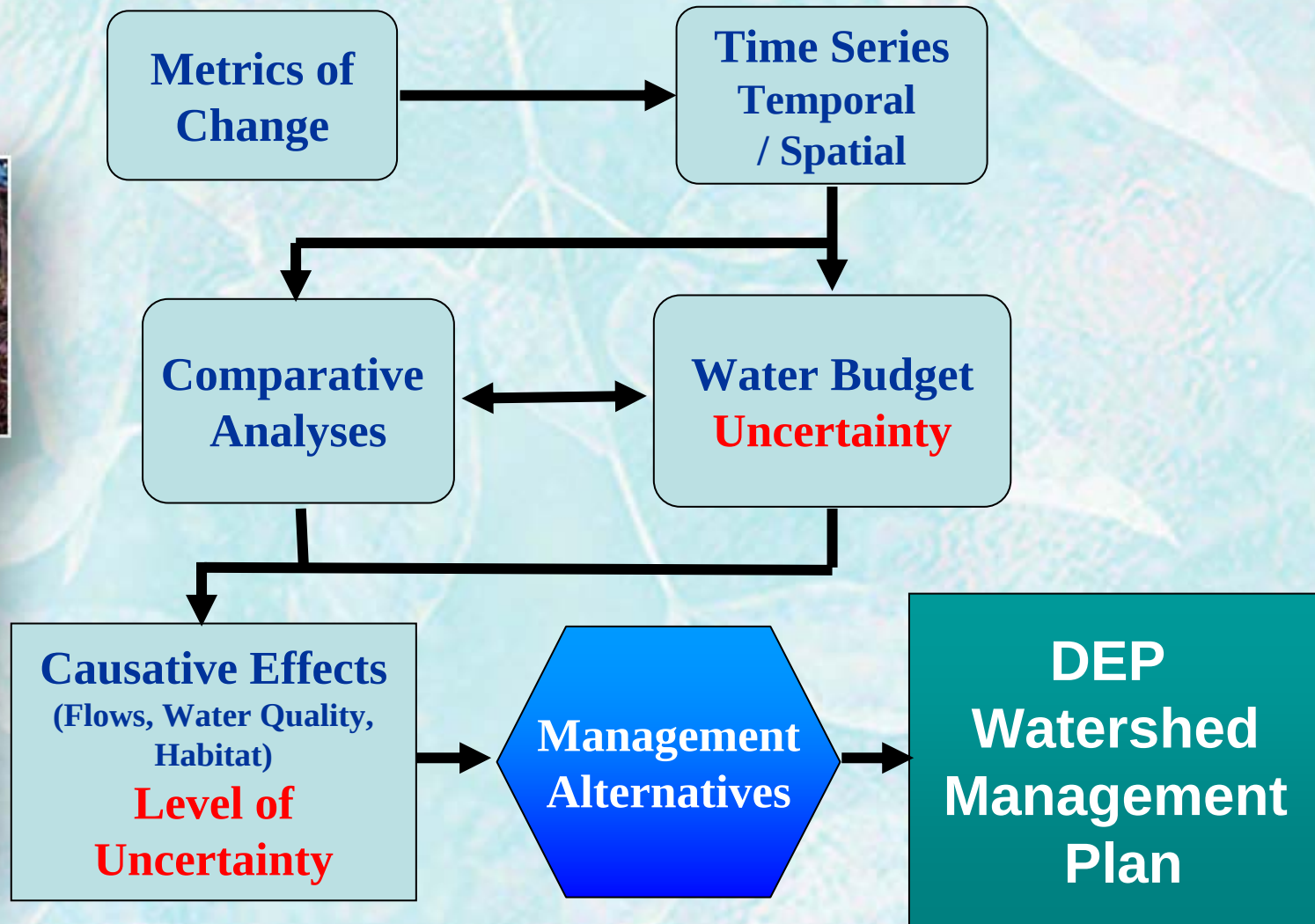


Peace River Cumulative Impact Study



August 9, 2006
Public Information Workshop

Integration of CIS & Management Plan



Need For Better Data

- Without detailed data, even more sophisticated models will have limitations to inferences
- In many instances currently available information is too general to develop needed specific conclusions



Need For Better Data

Selected Ongoing District Studies That Will Require Enhanced Data

- **HydroGeoLogic**

(Integrated Groundwater / Surface Water Model)

- **Ardaman**

(Evaluation of potential alternatives for minimum flows and levels restoration on the Upper Peace River between Lake Hancock and Zolfo Springs)

Data Acquisition

- Enhanced topography
- Structure elevations
- Hydrologic alterations (reconnections, storage, drainage)



Need For Better Data

- **Types of needed data**
 - **FLUCCS beyond level 2**
 - Urban / Industrial
 - Mining (reclamation)
 - Agriculture
 - **Specific Surface Model Coefficients**
 - Evapotranspiration
 - Recharge
 - Runoff
 - **Hydrologic Properties**
 - Mined lands (range of differences)
 - Shallow aquifers (coefficients)



Need For Better Data

- Without accurate groundwater and surface water coefficient estimates further models may be subject to discrepancies between expected and calibrated values
 - Example: Cumulative Impact Study water budgets
- Increased model accuracy and reliability are fundamental foundation components of planning and decision processes



Historic Data Gaps

- **Groundwater levels** (mid 1950s)
- **Historic water quality** (pre 1965)
- **Offsite discharges** (NPDES post 1972)
- **Groundwater quality** (~ 1985)
- **Metered groundwater withdrawals** (early 1990s)
- **Accurate sub-basin rainfall** (recent NEXRAD Doppler Radar)



Data Opportunities

- **Determination of pollutant potentials**
 - **Urban** (projected expansion)
 - **Mining** (current NPDES permits)
 - **Agriculture** (new herbicides and pesticides)
- **Synoptic baseline survey of water quality to identify potential issues**



Next Step: Resource Management Plan

The Peace River Basin Resource Management Plan:

- Must identify **regulatory and non-regulatory** actions to minimize cumulative impact.
- This study will provide both **regulatory and non-regulatory** recommendations.



Soliciting Ideas



The final step of this study is to solicit and evaluate ideas for incorporation into the Resource Management Plan.

The following concepts are “Straw Men” for discussion and are *not* the final recommendation of the consultants and *do not* have the approval of any state agency.

Regulatory & Non-regulatory Recommendations

Southern Water Use Caution Area (SWUCA)

- **Identify any roadblocks to implementation of the SWUCA Recovery Strategy and implementing rules in the Peace River watershed, specifically:**
 - Self relocation
 - Use of Net Benefit options
- **Discuss how “competing applications” may impact the Peace River watershed in the future**



Regulatory & Non-regulatory Recommendations

Wetland Storage Restoration

- **Prioritize wetland systems for restoration on cost/benefit basis**
- **Address the presumptive right of drainage**
- **Address ERP rules regarding the increase of runoff from restored wetlands**



Regulatory & Non-regulatory Recommendations

Phosphate Lands Reclamation

- Fund nonmandatory program to meet existing needs
- Create more flexibility in non-mandatory program to establish Integrated Habitat Network
- Remove acre-for-acre and type-for-type replacement for wetlands when mitigation is required under ERP



Regulatory & Non-regulatory Recommendations

Phosphate Regulatory Streamlining

- **Combine Conceptual Reclamation Plan and ERP**
- **Provide options for combining land use entitlements & ERP**
- **Provide regulatory incentives to address priorities of the Resource Management Plan**



Regulatory & Non-regulatory Recommendations

Water Supply

- Are there long-term water use commitments for certain high public interest uses such as public water supply?
- Identify re-hydration & reconnection opportunities
- Pursue mineralization abatement through QWIP and FARMS



Regulatory & Non-regulatory Recommendations

100-year Floodplains

- **Develop regulatory incentives to protect land within floodplains**
 - Enhance mitigation value of floodplain protection
 - Acknowledge heightened mitigation value of native uplands within floodplains
 - Remove time lag discounts from floodplain restoration as mitigation
- **Work with CARL programs to apply severance tax funds to floodplain acquisition**



Regulatory & Non-regulatory Recommendations

**SWFWMD and DEP should convene a
Standing Working Group from:**

- Interested public and environmental groups
- All basin local governments
- Peace River/Manasota Regional Water Supply Authority and other public suppliers
- Charlotte Harbor NEP
- Agricultural interests
- Electric Power Generation Companies
- Phosphate land owners

