

Written Comments from February 3, 2012 LECWSP WRAC Issues Workshop

WHAT WATER SUPPLY/WATER RESOURCE ISSUES ARE OF GREATEST CONCERN TO THE ENTITY YOU REPRESENT?

- Sufficient water available to City of WPB WTP for Town of PB/City of WPB.
- Reuse regulation impacts, availability of C-51 project, storage and Floridan impacts and sustainability, impacts on water quality regulations, how will LEC impact existing permit use allocations, and how will capital investment be made more secure for users.
- Population/service area calculations. Projection of 2010 per capita (water shortage year) for 2020 and 2030 per capita. Keeping permit allocation.
- Storage, sea level rise, population and per capita projections, sustainability of Floridan, and include aspects of change the regional climate change action plan.
- Allow existing wells to stay in operation, address salt water intrusion regionally, and C-51 reservoir.
- Uncertainly about how economic recovery will impact water demands or per capita consumption.
- Maintain surface water levels to provide raw water for the surficial system.
- Water deliveries to the environment, namely Everglades and Biscayne National Parks.
- As a (consecutive/conservative) water system we want to make sure our water demands and supply are safe and our needs are met without higher rates being forced upon smaller utilities from the large utilities.
- Primary – water quality (NPDES, TMDL, and numeric nutrient water quality standards. Secondary – water supply and re-use for our utility and agriculture.
- Agricultural water supply – AWS not economically feasible for growth. Need additional water source strategy.
- Available water to support economic development.
- Sustainable, affordable drinking water supply.
- L-8 Reservoir finalized operational mode with capacity of > 350 cfs for optimization of the L-Basin as a recipient tool for building capacity for MFLs and CUPs, for events, long-term.

NEAR TERM (5 YEAR PLANNING HORIZON)

- Fixes and cost of same needed when Lake O goes below 10.5-ft then providing Ag more water than needed when everyone else is dying of thirst resulting in severe economic impacts. Near term fixes may need rapid, AKA, streamlined permitting process by SFWMD and USACE.
- Floridan supply sustainability and impact to deep disposal cost and timing, C-51 cost and timing, NPDES issues impact to reuse on a large scale, WQ regulation impacts to ability to implement reuse, security of capital investments, impact of storage projects on potential to flood, particularly storage of reuse.
- Not allowing sufficient time to implement alternative water supplies now that population has decreased. Increased (due to year round irrigation) volumes for flushing that now become part of the per capita.
- C-51
- Assist efforts to expedite schedule of C-51 reservoir project, pursue state and federal funding on regional basis by all users in south Florida, combine efforts - all stakeholders into single application.
- Ability to obtain adequate funding to construct AWS projects, sustainability of the Floridan aquifer, feasibility of recharging the aquifer with large quantities (possible 180 MDG if all outfalls decide to recharge the Floridan) of reclaimed water, and water supply sustainable levels (quality and quantity).
- Desire to move forward to stormwater capture; the other two alternatives reclaimed and Floridan have issues. Reclaimed – nutrient and TMDL issues to Class II water. Floridan – appears to be a lot of discussion on the sustainability.
- District Canal Operating Levels – especially dry season releases within the SE drainage basins in and around Homestead and Florida City including Model Lands.
- Biscayne Bay rule development and the fact that the Bay needs more water.
- Compliance with numeric water quality standards as applicable.
- Conservation of existing water resources, fixing leaking systems, and reduce use by electric power generation.
- LORS08 and CEPP integration, Water Shortage management Plan, and risk analysis of Lake Okeechobee levees to see about storing more water in lake within existing schedule flexibility.
- Level of certainty for different users (utility vs. agriculture), protecting water resources influenced by Lake Okeechobee regulation schedule.
- Inconsistent levels of service between planning areas – LOK 1 in 6; LEC 1 in 10. Drought management, Lake Okeechobee planning as major source with trickle down effects, funding and impacts in light of CERP delay.
- CUP stability – no changes to allotments resulting from 20-year plan.
- Drainage in existing urban areas to permit redevelopment, prevent sprawl, and keep land in Ag and other uses that preserve acres in pervious surface. Need urban utilities to reduce stormwater to tide in older built areas.
- Sustainability of long-term use of the Floridan Aquifer – PBCWUD does not see this as a sustainable resource alternative. Replenishment of the Biscayne and shallow aquifer which suffers from historic

development standards that encouraged minimization in storage? And previous construction techniques maximizing flood protection and land use. This needs to be revisited and addressed as a plan objective. Restore AWS funding.

- Economy, rates, political pressures with competing utility needs and regulation. Water supply and permit certainty. Money/co-funding for AWS projects. SFWMD leadership on regional projects such as SFWMD did on for Tampa Bay Water and Peace River. Same scrutiny and regulation of self-supplied irrigation users/homeowners and the cumulative effect of all uses affect the resource (and that is not well-accounted for). Address ASR issues – underground injection required treatment of ASR systems. Also treatment hurdles and research.
- Completion of armoring of embankment elements at L-8 reservoir. Completion of study and installation of L-8 reservoir pumps. WPB to complete feasibility assessment of seepage recovery methodologies between Control 2 and Control 3. Species of significant concern (i.e. endangered) become central consideration of comprehensive water supply allocations ... specific to "Species Recovery" of the iconic species such as the Everglades Snail Kite, Wood Stork, etc. which should be included as central drivers of long-range planning.

LONG TERM (20 YEAR PLANNING HORIZON)

- CERP/CERP implementation to provide continuous supply of water.
- Advent of potential moratoriums due to supply deficiencies. How will reuse regulations on parameters of concern be addressed; above issue will likely still remain.
- Keeping permit allocation as conservation and AWS strategies are implemented. The utility volume requirements are being too narrowly defined (uncertainly too great for this). Small use permits (such as < 100,000 MGD) are not accounted for and continue to be issued. District involvement in C-51 as a participant and not a regulator; C-51 should be a SFWMD project and passed on to all users in the 16 county area since most would benefit.
- Sea level rise
- Assist effort regarding C-51 project; project needs to be evaluated as water supply for next 100+ years not just next 20 years of projected demands.
- Climate change impacts (sea level rise, drought frequency).
- If the regional C-51 project can be constructed it would play a major role in the water supply needs for the entire LEC.
- Accommodating sea level rise.
- CERP water needs, how does water demands by proposed energy projects (power plants) impact water needs for Everglades Restoration? Sea level rise projections. Which CERP projects are you looking at? ASR? CERP benefits? The timing and funding of these projects is uncertain.
- More storage of water and less water moved to ocean as a result of high rainfall.
- Water supply and quality; please remember to and take flood protection into account. Who pays – 'rubber hits the road.'
- Changing landscape watering, changing plumbing codes to encourage less water use, new green building standards, and encourage cisterns on new buildings. Look at pollution in the aquifers, particularly how it could impact future water supply.
- Agricultural water supply – AWS not economically feasible for growth. Need additional water source strategy.
- Ocean outfall recovery, quantity vs. cost on a per gallon, per service area, per local unit of government to conserve or reuse water. Climate change influence and impacts using what source(s) of information.
- Restored areas needing water on Tribal reservations, ocean outfall and impacts, funding, economic development and future demands/growth.
- Regulatory certainty – longer term, stable permits resulting from sustainable AWS projects e.g. C-51 reservoir.
- Drainage in existing urban areas to permit redevelopment, prevent sprawl, and keep land in Ag and other uses that preserve acres in pervious surface. Need urban utilities to reduce stormwater to tide in older built areas.
- Lake Okeechobee –original purpose of the lake, in the past, was water supply. When Herbert Hoover Dike is re-stabilized, seepage will be reduced and if stages remain low, this will no longer be a back-up

source. C-51 Reservoir – more storage of water lost to tide needs to be a priority for discussion in the LECWSP.

- Implement Groundwater Recharge Credit Banking system to encourage increased hydro-periods throughout region and reduce discharge to tide. Widen M-Canal and Control 2 modified (Phase II) to accommodate 350 cfs. Incentives to storage (i.e. spatial) elements into all Water Supply Plans to encourage expansion and rehabilitation of wetland components compromised over the last century to increase hydroperiod elements and composite recharge to groundwater mass water balances (possible credits in CUPS). Incentives to reuse and expand public education to buffer and deflect public perceptions of liabilities and risks associated with the use of reuse (possibly in form of credits to CUPS). Expanded consideration of alterations to proposed water supply forecasts as a result of climate change effects. Plans should be kept contemporary and update to provide resiliency long-term. A comprehensive mass water balance study to be completed to bring about a reliable and adoptable groundwater recharge temporal and spatial relationship to existing surface water contributions and capacities. Water Resource Caution Areas (State University System White Paper) which expressly concerns Florida water management and adaptation in the face of climate change.

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- Conservation – use of gray water/use water twice, reduce use of potable water for landscape irrigation
- Inconsistency among service areas, management of Lake Okeechobee and droughts/water shortages, funding.
- Why can't the use of the Floridan model be sped up? Answer – the time is necessary to address the issues raised in the Peer Review.
 - How do we understand the sustainability of the Floridan aquifer?
- If the Floridan aquifer is not the alternative source, what is Plan B?
- The ability to have the Ocean Outfall water be used to recharge the Floridan aquifer (water quality and quantity taken into effect).
 - What water quality standards will be followed for recharge injection into the Floridan?
- The per capita numbers were based on use during the economic downturn; what will happen when the recovery moves ahead and people start to use more and the actual per capita goes up?
 - The 2 days/week landscape irrigation rules have affected the per capita water use but the actual reduction because of this is not clear. There are likely a number of reasons for the reduction including the economy and BMPs.
- Population and per capita calculations and projections
 - Question the use of 2010 because that was a water shortage year, a dry year, and restrictions were in place.
- Some permits require the PWS utility to use the Floridan aquifer as the first source; is this a reasonable requirement during the wet season when water in the Biscayne aquifer is abundant and the aquifer is readily recharged? (North Miami-Beach)
- How does the District work with power generation utilities to improve the efficiency (water use) of energy production; what conservation steps can be taken?
- Sea level rise as it affects coastal wellfields.
- Climate change
- Canal stages in south Miami-Dade as they affect the FKAA wellfield. The District is still using 1929 NGVD and this affects the canal stages.
 - C-51 Reservoir: Recommendation that the District take the lead and the cost be shared by all District taxpayers.
- How will ASR as described in CERP be addressed and what is currently the state of ASR? Is clustering still proposed?
 - The plan will not address regional ASR but could look at ASR in the Talisman. The regional study and report will be complete next year and currently two sites are in cycle testing. This report will include regional recommendations.
- Comments on Central Everglades
 - Please be sensitive to needs of coastal utilities to have water while still providing water for the environment.
 - Less surface water in the system causes less ET which may cause less rainfall?