CFWI RWSP Team Update

Steering Committee
July 22, 2016

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CFWI RWSP Team Updates

- Schedule
- Base Year / Plan Horizon
- Historic Years / Publication
- Population Projections
- Water Demand Methods
- Technical Editor
- Next Steps
- Questions

Information Items

- Schedule
- Base Year
- Publications

Schedule

2020	Key Components	Start	End
Regional Water Supply Plan	ECFTX Model Completion	1/1/2015	12/30/2017
	Develop population and water demand projections – tabular and spatial distribution	1/1/2015	12/31/2017
	Per Guiding Principle 3 – Develop consistent rules (Regulatory Team)	4/1/2016	12/31/2016
	Update water conservation and reclaimed water estimates and options	4/1/2016	12/31/2018
	Update water supply and water resource development project options	12/15/2017	8/16/2018
	Evaluate and assess water sources	12/31/2017	9/8/2018
	Produce Draft 2020 Regional Water Supply Plan (first internal draft 6/4/2019)	4/30/2019	10/9/2020
	Conduct public workshops and meetings on the Draft 2020 Regional Water Supply Plan	2/03/2020	10/20/2020
	Governing Board Approvals	10/13/2020	10/20/2020

Base Year / Plan Horizon

- 2015 Base Year
- Plan Horizon through 2040
  - Projections in 5-year increments
  - Projections in tabular and spatial format

Historic Years / Publication

- Historic data to be used = 2011-2015
- Historic data will match ECFTX model
- County level population projections
  - Bureau of Economic and Business Research (BEBR), 2016 publication
- Florida Department of Agricultural and Consumer Services (FDACS)
  - Florida Statewide Agricultural Irrigation Demand (FSAID), 2016 publication

Action Item

- 2 Population projection options presented
- Need decision from Steering Committee on path forward

Population Projections

- Option 1 – BEBR parcel level projections

Population Projections

Option 1 – Pros

- Consistency
  - Official estimates
  - Legislature recognition
- Efficient methodology
  - Saves time
- Standardized methodology
  - Across and within Districts
  - Reduces conflicts
  - Reduces duplicative costs
  - Facilitates regional planning
- Suitable for regulatory use
- Multiple uses
  - Inputs to other models and forecasts
  - FSAID Model
- Summarize results
  - Improved accuracy
  - Improved flexibility
    - by utility and any other geographic unit
- Increased flexibility
  - Adjustments for local conditions/knowledge
    - Density trends, planned redevelopment, SunRail
- Improved confidence with stakeholders
  - Neutral third-party
  - Reduce bias

Population Projections

Option 1 – BEBR Parcel Level Cons

- Cost
- CFWI method would differ from the current methods that are used by SFWMD and SJRWMD

Population Projections

Option 1 – BEBR Parcel Level Cost

- Estimate of $145,000
- Propose to split evenly between the Districts
  - $48,334 for each District

Population Projections

Option 2 – Utility specific historic growth rate (2011-2015)

Pros

- Easy to implement
- Reproducible by others
- Easy to explain
- Accepted method in other RWSPs
- Easy to update

Cons

- No buildout
- No spatial growth drivers
- Historical population calculated inconsistently
- No impartial 3rd party
- Not always suitable for regulatory use
- Fixed growth rate over 20 years
- No identification of self-supply
- May initially exceed BEBR projections

Request for Action

- Steering Committee direction on population projections options
  - Option 1 – BEBR Parcel
  - Option 2 – Historic Growth Rate

Concurrence Items

- Water Demand Projection Methods for planning
  - Public Supply
  - Small Public Supply Systems
  - Domestic Self-supply
  - Power Generation
  - Landscape/Recreation/Aesthetic
  - Commercial/Industrial/Institutional and Mining/Dewatering

Water Demand Methods for Planning

Public Supply and Domestic Self-Supply

- Public Supply
  - Allocations equal to or greater than 0.100 million gallons per day (mgd)
  - Specific 5-year average gross per capita
- Small Public Supply Systems
  - Allocations less than 0.100 mgd
  - Specific 5-year average gross per capita
- Domestic Self-Supply
  - Residences with their own well, not served by a utility
  - County-wide 5-year average residential per capita

Water Demand Methods for Planning

Power Generation

- 10-year site plan
  - Contains historic and future megawatts
- Five-year historic average - water use per megawatt
- Use per megawatt average applied to future megawatts

Water Demand Methods for Planning

Landscape/Recreation/Aesthetic

- Golf Courses
  - Acreage from comprehensive plans, sector plans, industry representatives, etc.
  - Water demand via Agricultural Field-Scale Irrigation Requirement Simulation rates
  - Increase added to base year
- Other Landscape/Recreation/Aesthetic
  - Percent population growth applied to 5-year average water use
  - Increase added to base year

Water Demand Methods for Planning

Commercial/Industrial/Institutional and Mining/Dewatering

- Percent population growth applied to 5-year average water use
- Increase added to base year

Request for Action

- Steering Committee concurrence on water demand methodologies presented to be utilized for planning purposes

Information Item

- Planning Water Demand Projection Methods
  - Agricultural

Water Demand Methods for Planning

Agricultural

- FDACS FSAID 3
  - Acreage and water demand projections
  - Spatial locations
  - By crop category
  - Average and 1-in-10 year
- AFSIRS
  - Comparison of water demand projections
    - Using FSAID acreage projections

Information Item

- Technical Editor

Technical Editor

- Two proposed internal drafts
  - Includes appendices
- First external draft
- Final external draft
- Comments and responses document
- Final and web ready after approval
- FY 2018 budgets
  - Total estimate $200,000
  - Split evenly between Districts
    - $66,667 each

Next Steps

- Refine master schedule
  - Continue integrating technical teams
- Complete historic dataset in coordination with ECFTX
- Develop initial draft water demand projections

Questions?