

# **Water Demand Projections**

## **2010 Customer Water Demand Projections (2011 – 2030)**

**Item 8a**

**March 3, 2010**

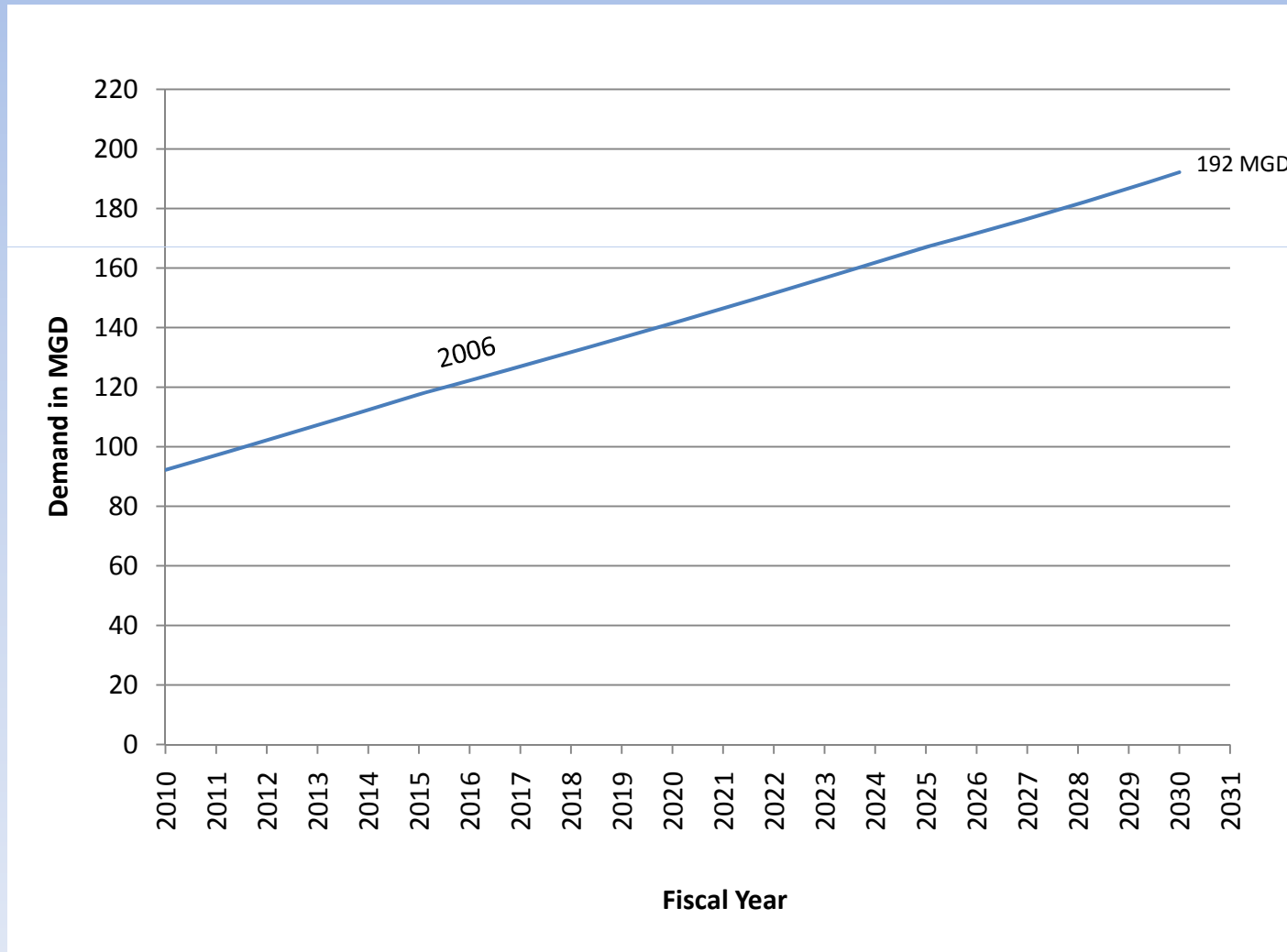
# Annual Water Demand Projections

- Requirement of the Master Water Supply Contract
- Each Customer provides the Authority its projected 20-year water demands
- Portion of demand to be supplied by Authority
  - Average daily quantity
  - Peak month average day
  - Maximum day
- Used for planning and budget

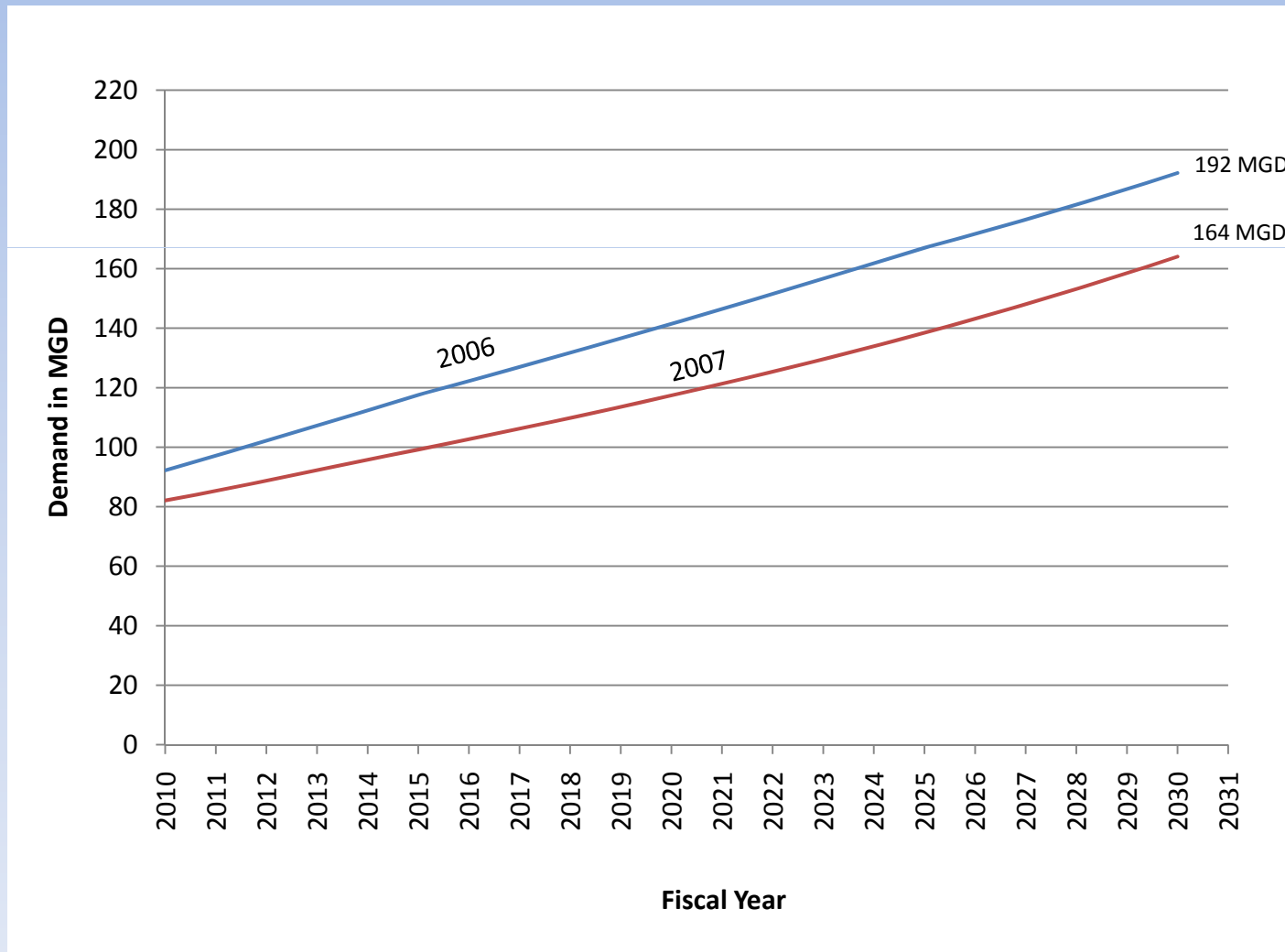
# Discussion Outline

- **Regional demand projections comparison:  
2006 – 2011**
- **Individual customer demand & supply  
projections**
- **New Authority Development Schedule**

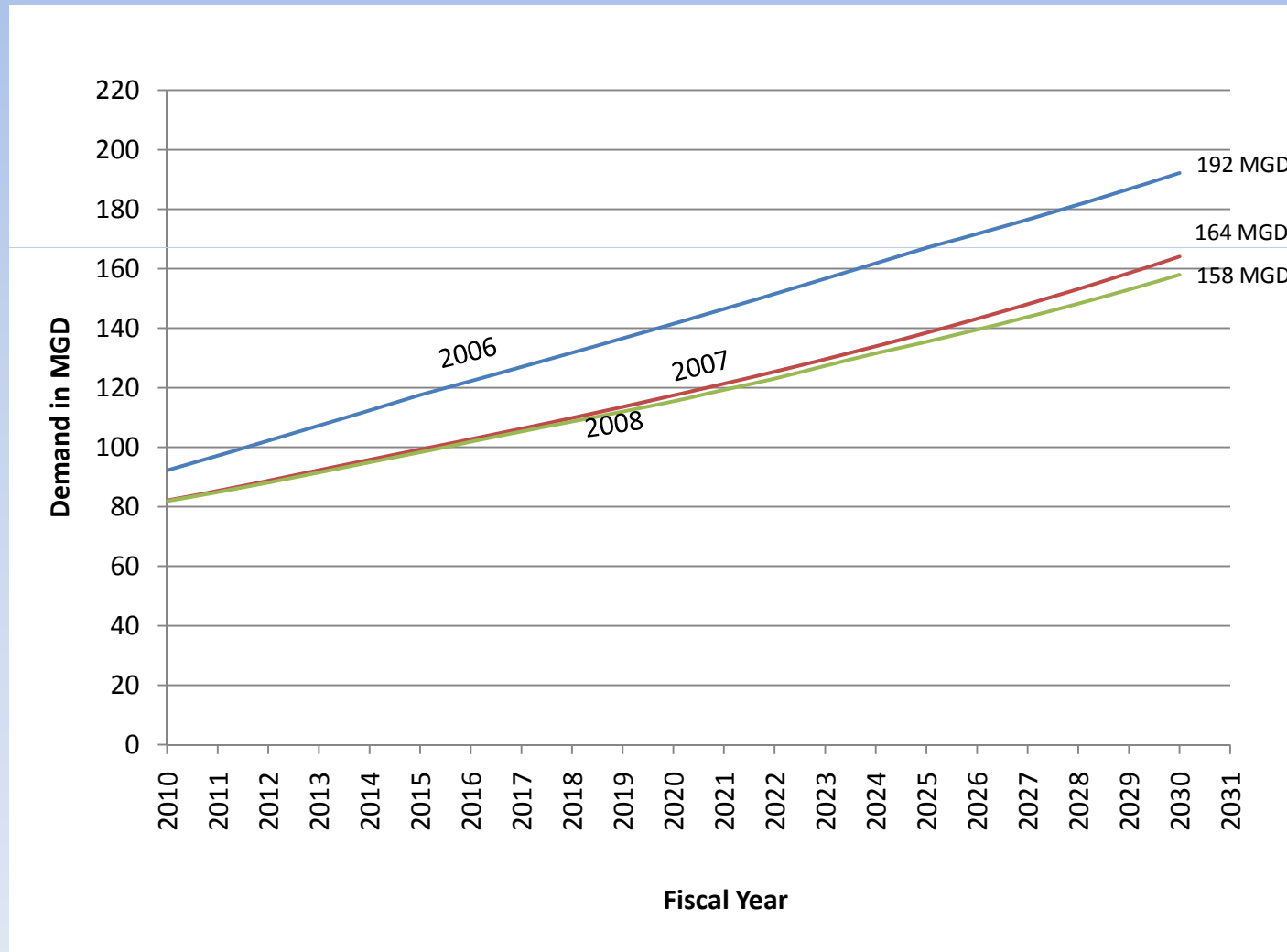
# Customer Demand Projections – Past 5-years (2006)



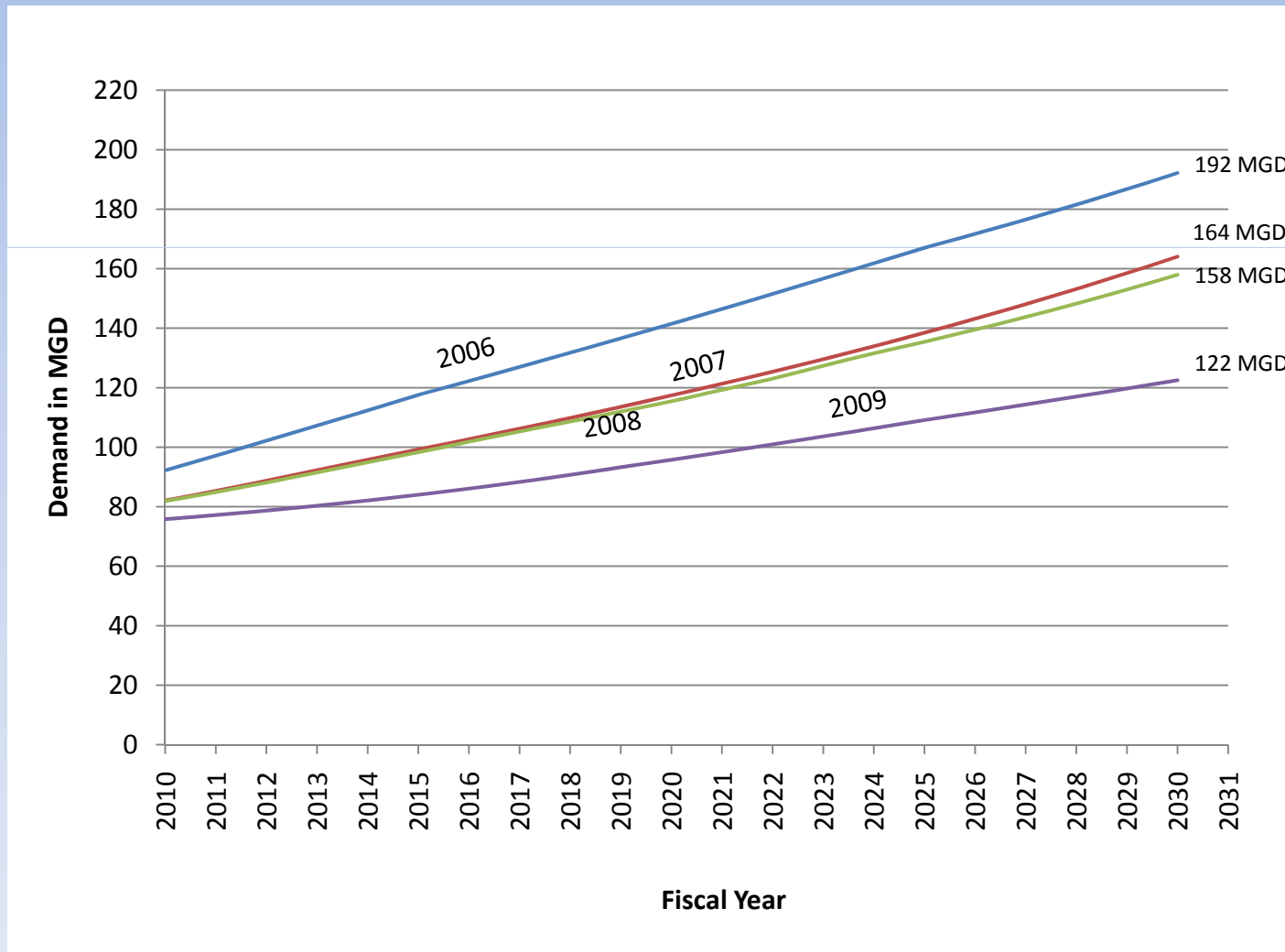
# Customer Demand Projections – Past 5-years (2006 - 2007)



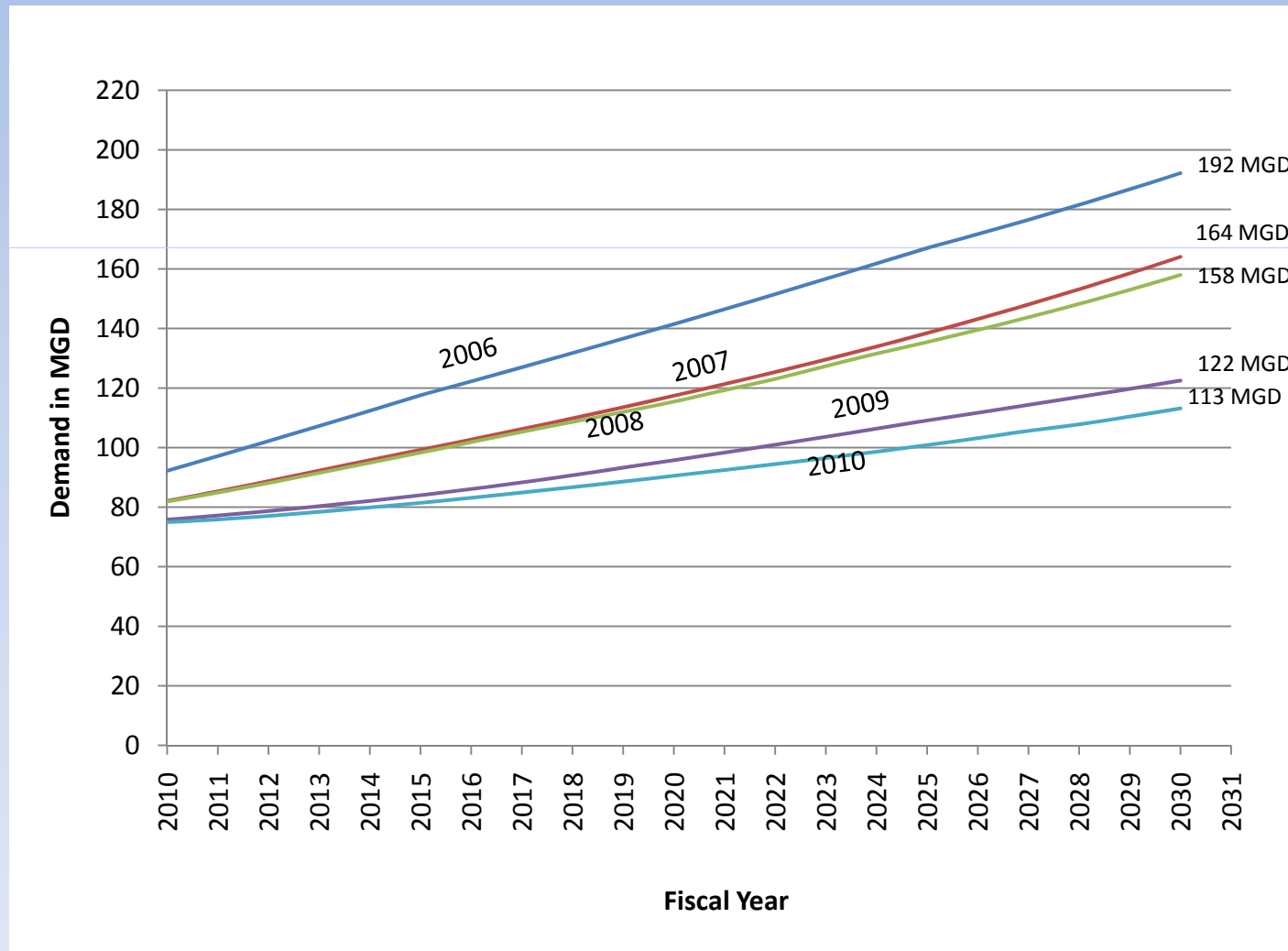
# Customer Demand Projections – Past 5-years (2006 - 2008)



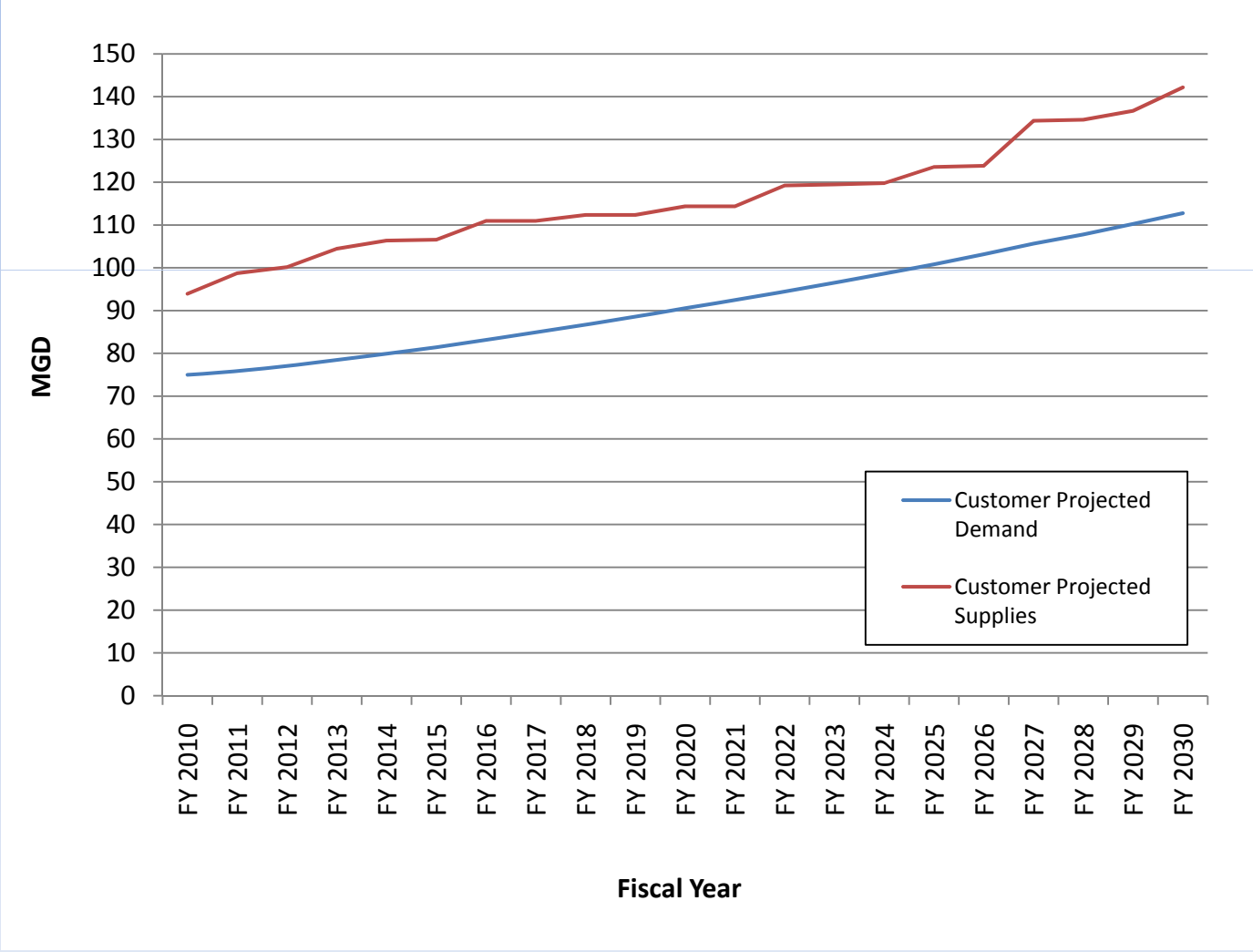
# Customer Demand Projections – Past 5-years (2006 – 2009)



# Customer Demand Projections – Past 5-years (2006 – 2010)

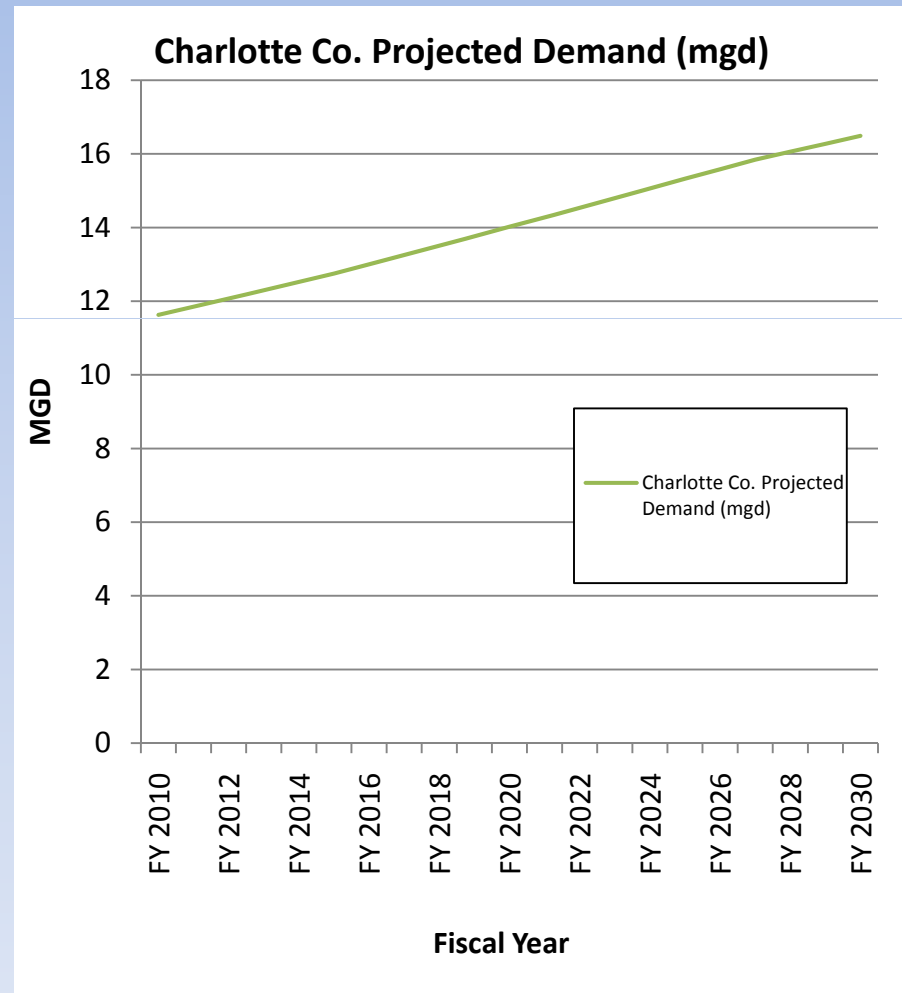


# Customer Supply & Demand Projections



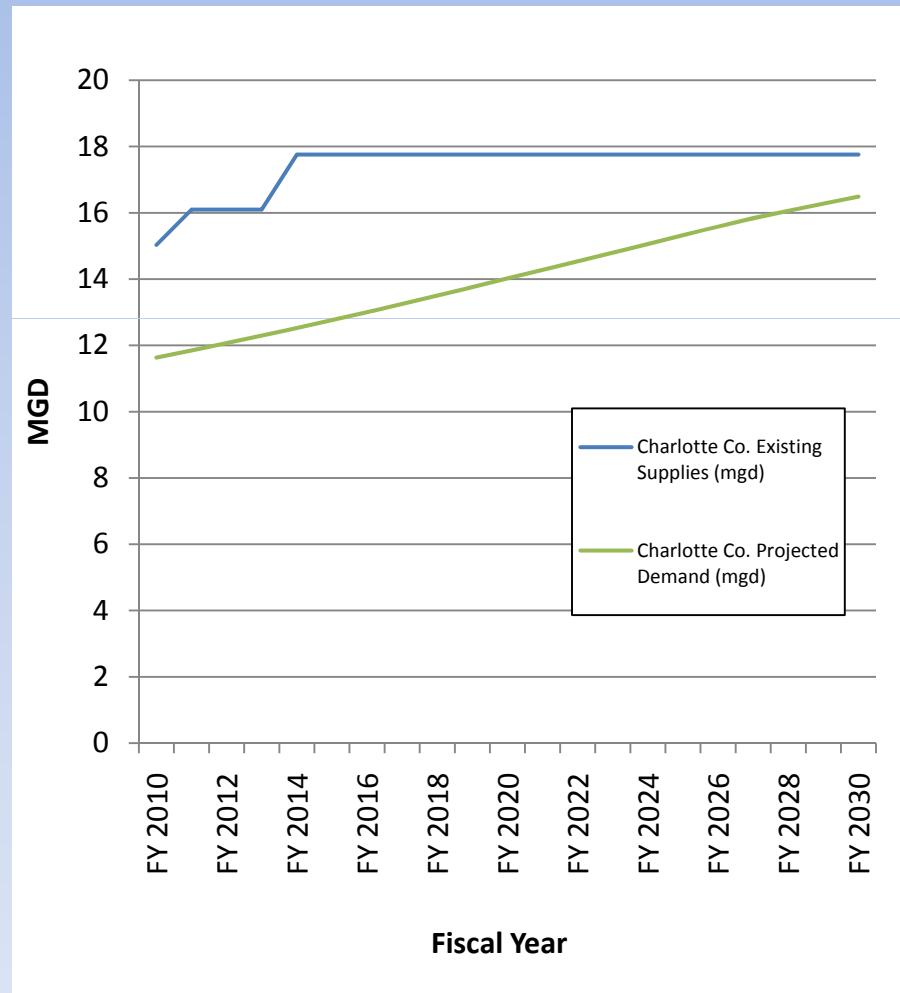
# Charlotte County

- Demands:
  - 2011 - - 11.85 mgd
  - 2030 - - 16.49 mgd



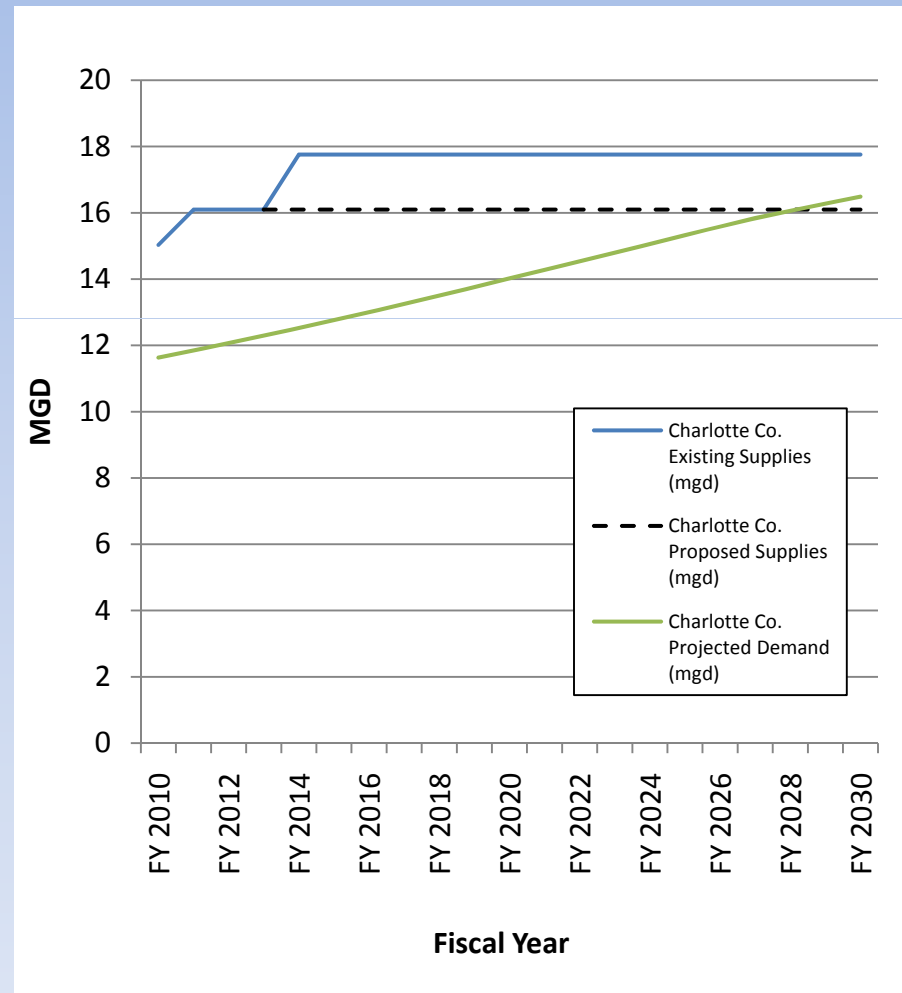
# Charlotte County

- Demands:
  - 2011 - - 11.85 mgd
  - 2030 - - 16.49 mgd
- PRF Contract Supply:
  - 2011: 16.10 mgd
  - 2014: 17.76 mgd



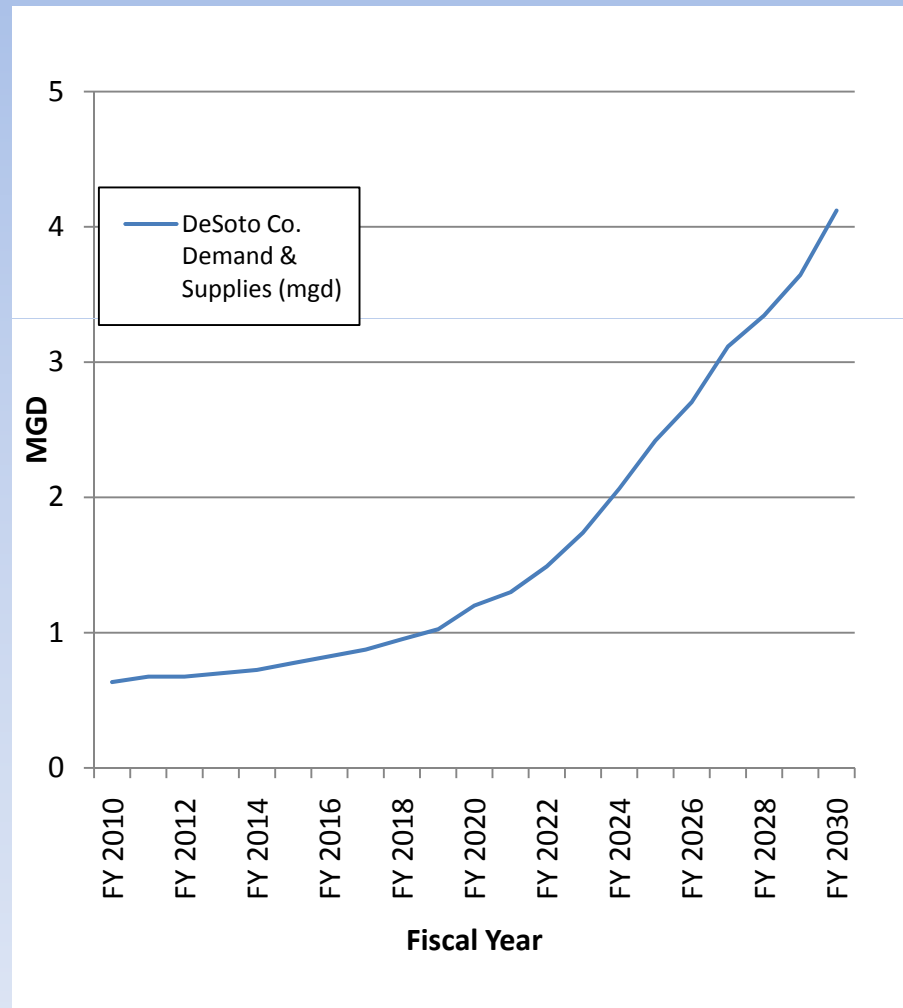
# Charlotte County

- Demands:
  - 2011 - - 11.85 mgd
  - 2030 - - 16.49 mgd
- PRF Contract Supply:
  - 2011: 16.10 mgd
  - 2014: 17.76 mgd
- 2010 Request:
  - Eliminate Exhibit C Quantities
  - County Develops 0.4 mgd by 2030



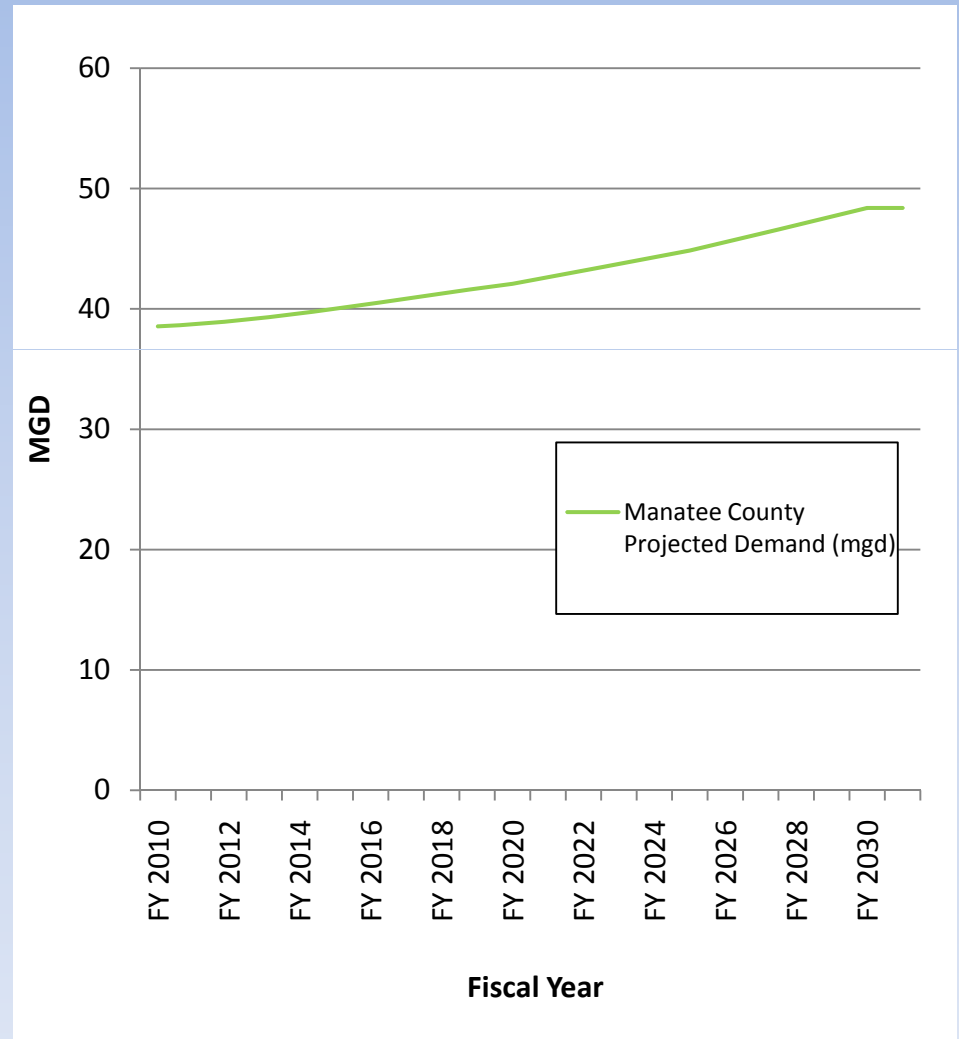
# DeSoto County

- Demands:
  - 2011 - - 0.675
  - 2030 - - 4.12 mgd
- PRF Contract Supply:
  - 2011: 0.675 mgd
- New Authority Supply:
  - 2013- 2030: 3.4 mgd



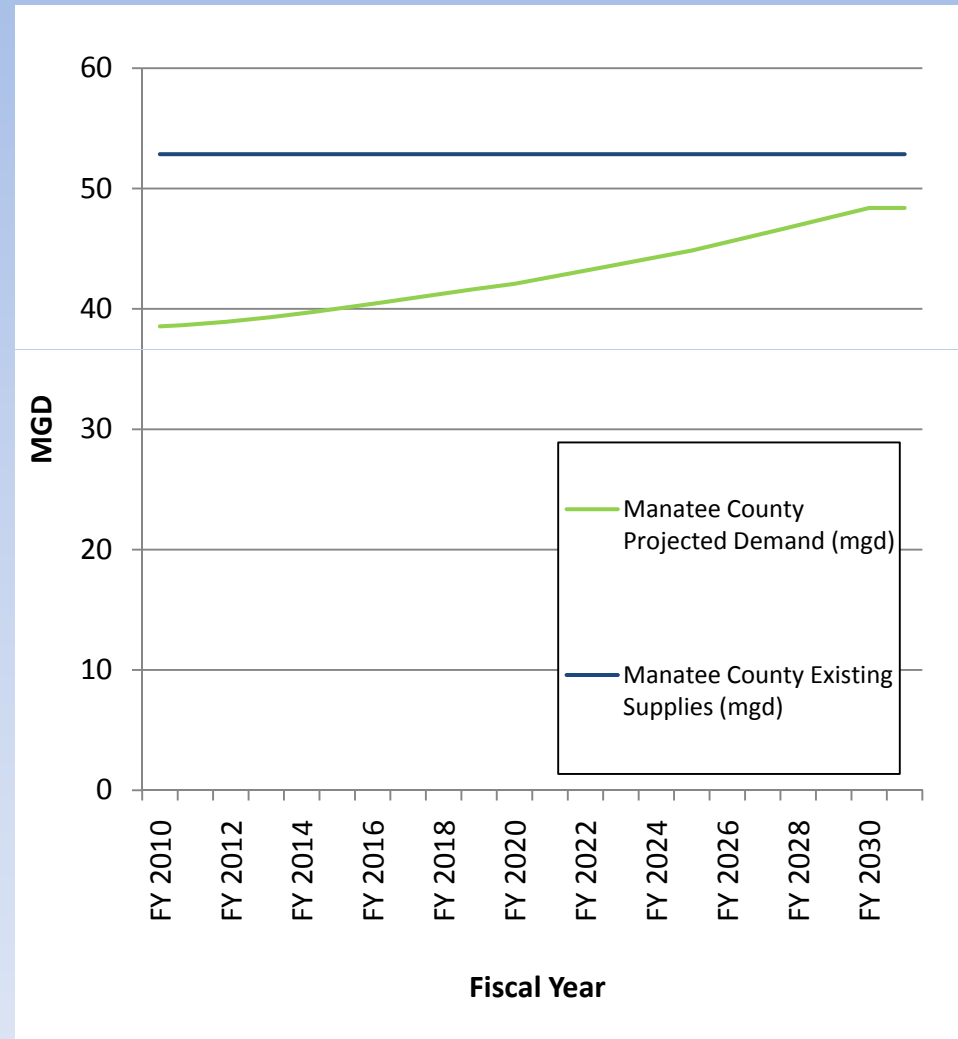
# Manatee County

- Demand Projections:
  - 2011 - - 38.7 mgd (not including deliveries to Sarasota Co)
  - 2030 - - 48.4 mgd



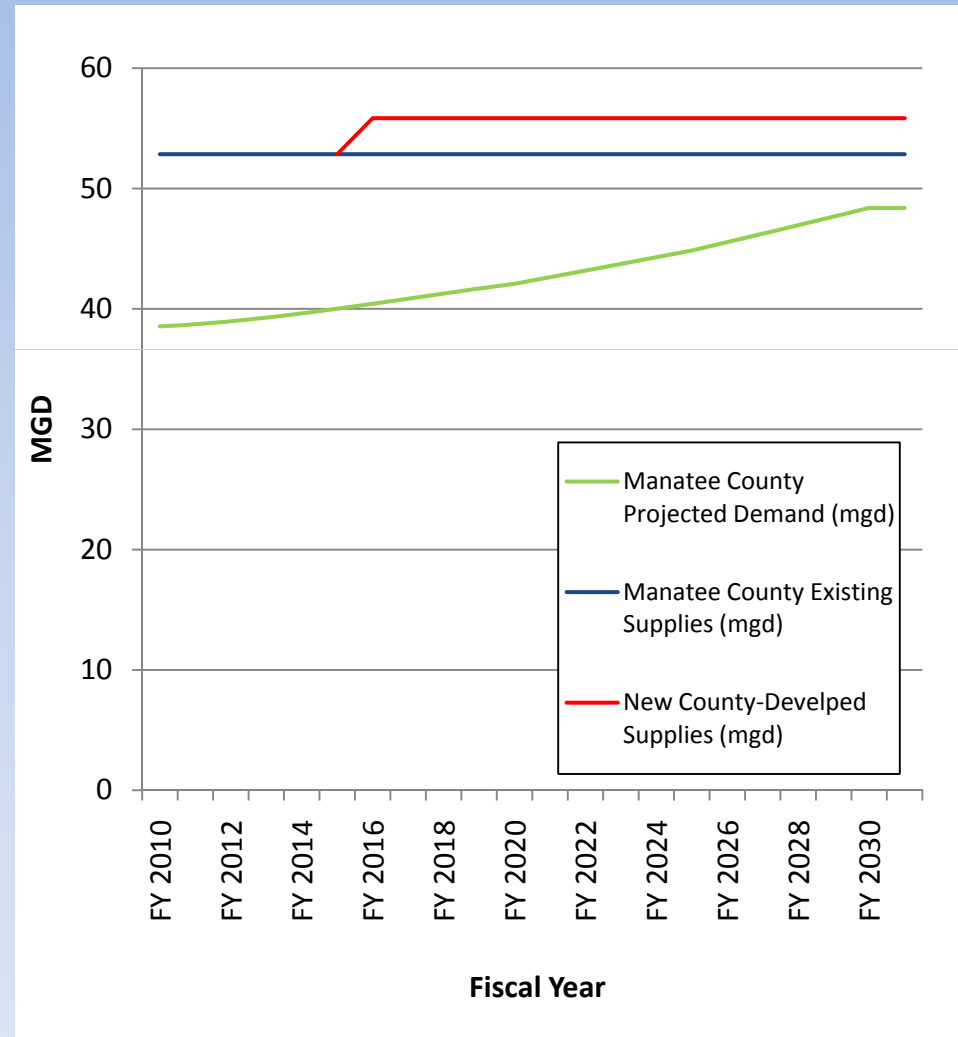
# Manatee County

- Demand Projections:
  - 2011 - - 38.7 mgd (not including deliveries to Sarasota Co)
  - 2030 - - 48.4 mgd
- County Supply - - 52.85 mgd
- PRF Contract Supply -- 0



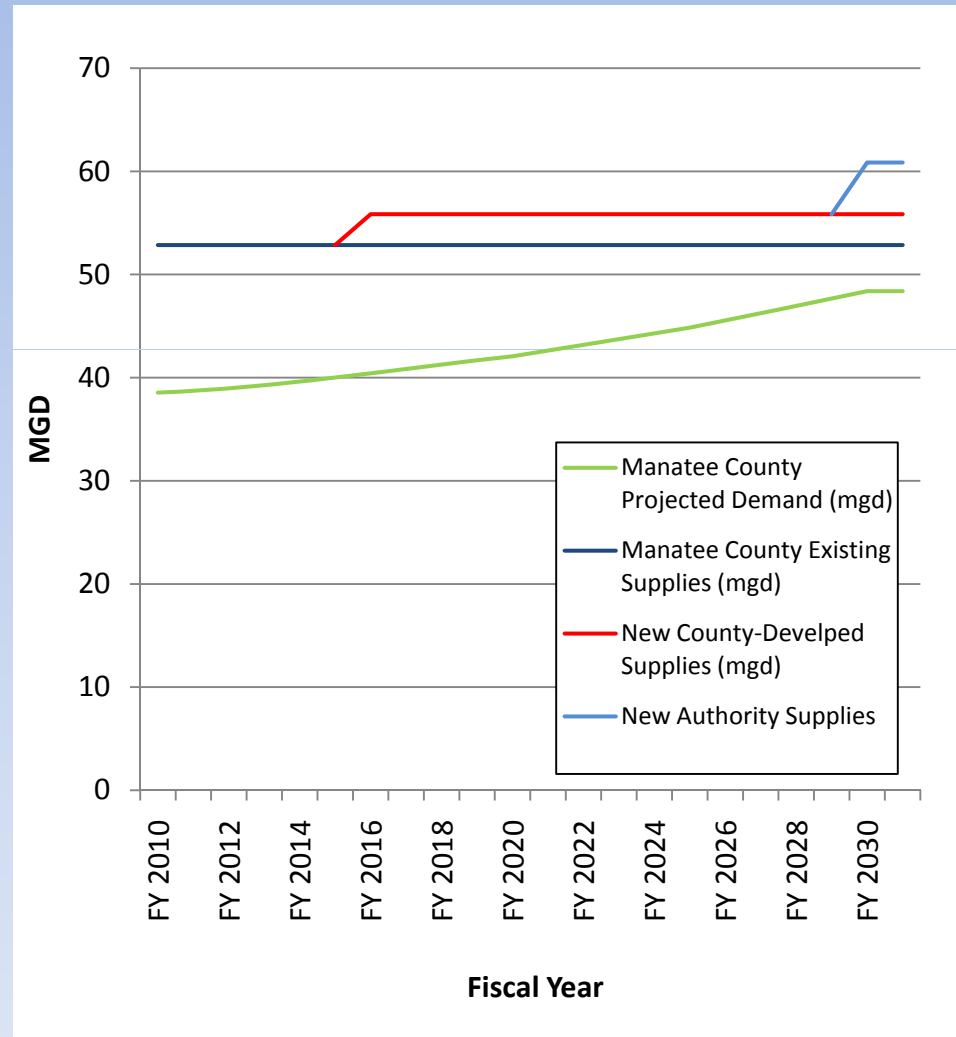
# Manatee County

- Demand Projections:
  - 2011 - - 38.7 mgd (not including deliveries to Sarasota Co)
  - 2030 - - 48.4 mgd
- County Supply - - 52.85 mgd
- PRF Contract Supply - - 0
- New Supply:
  - 2016: 3.0 mgd (County)



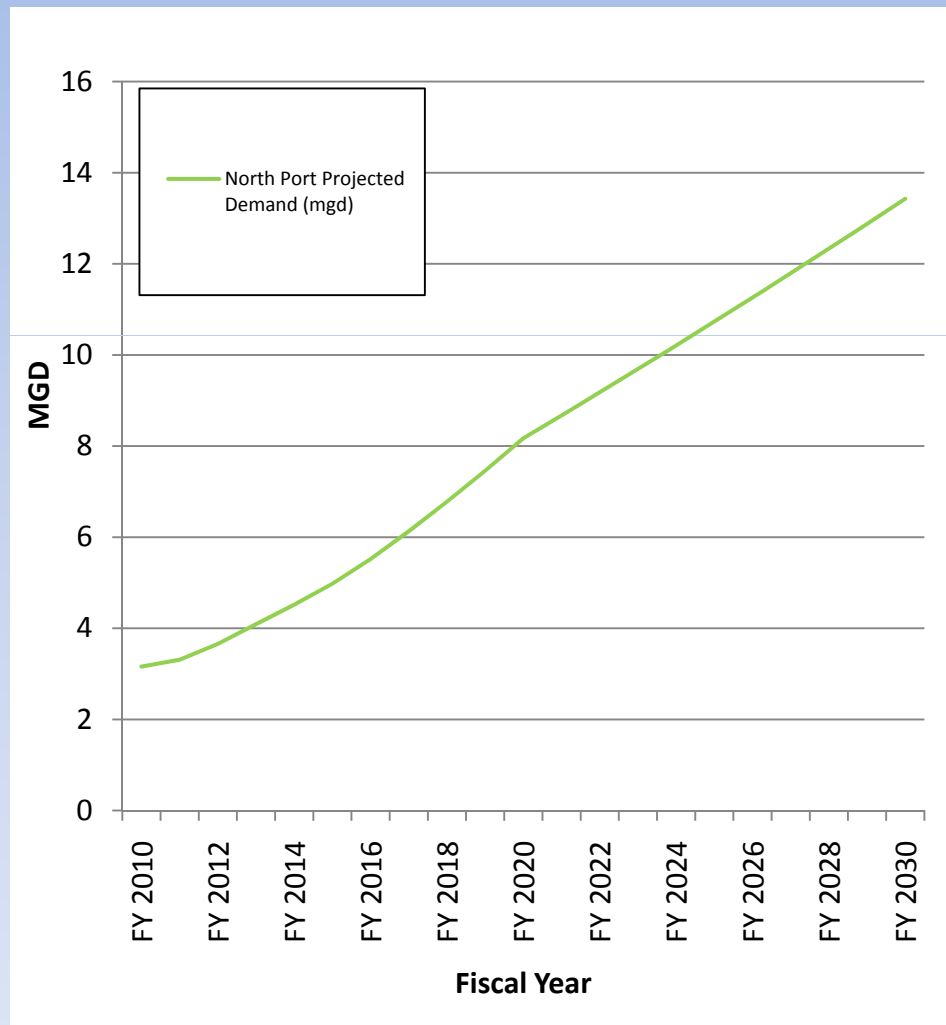
# Manatee County

- Demand Projections:
  - 2011 - - 38.7 mgd (not including deliveries to Sarasota Co)
  - 2030 - - 48.4 mgd
- County Supply - - 52.85 mgd
- PRF Contract Supply - - 0
- New Supply:
  - 2016: 3.0 mgd (County)
  - 2030: 5.0 mgd (PRMRWSA)



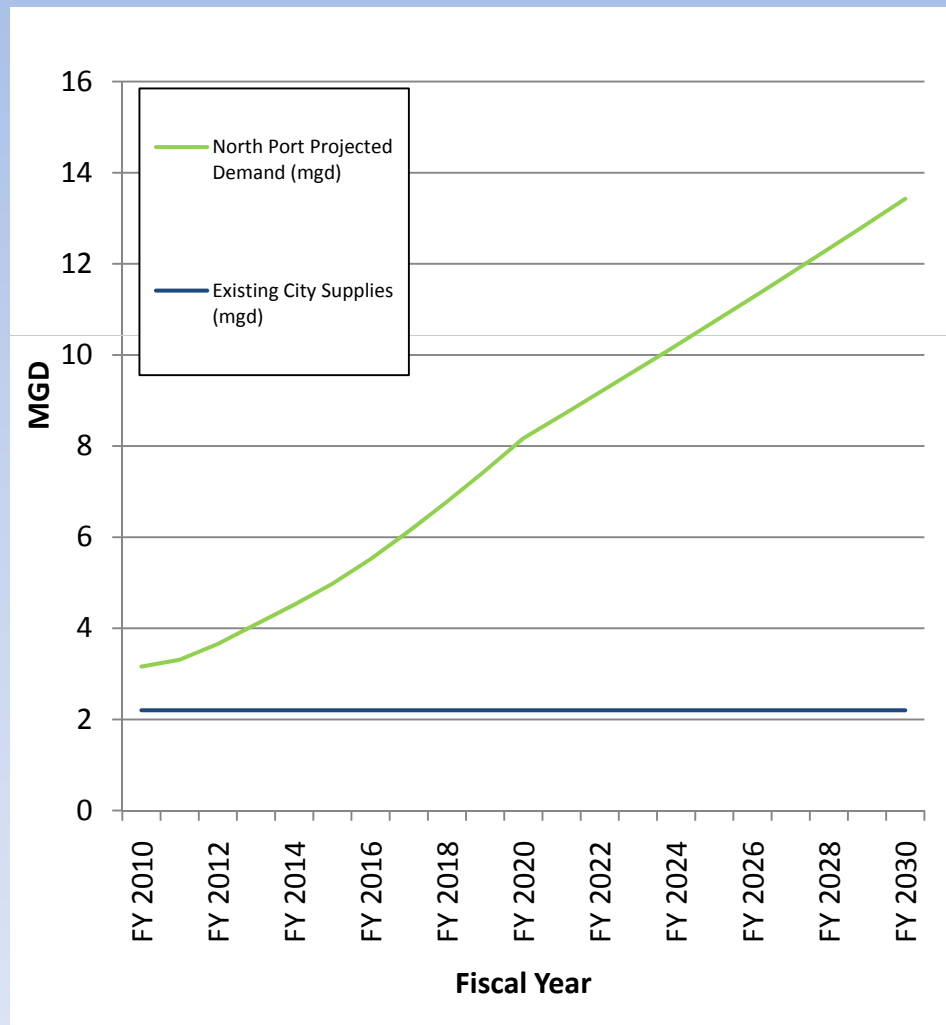
# North Port

- Demand Projections:
  - 2011 - - 3.31 mgd
  - 2030 - - 13.43 mgd



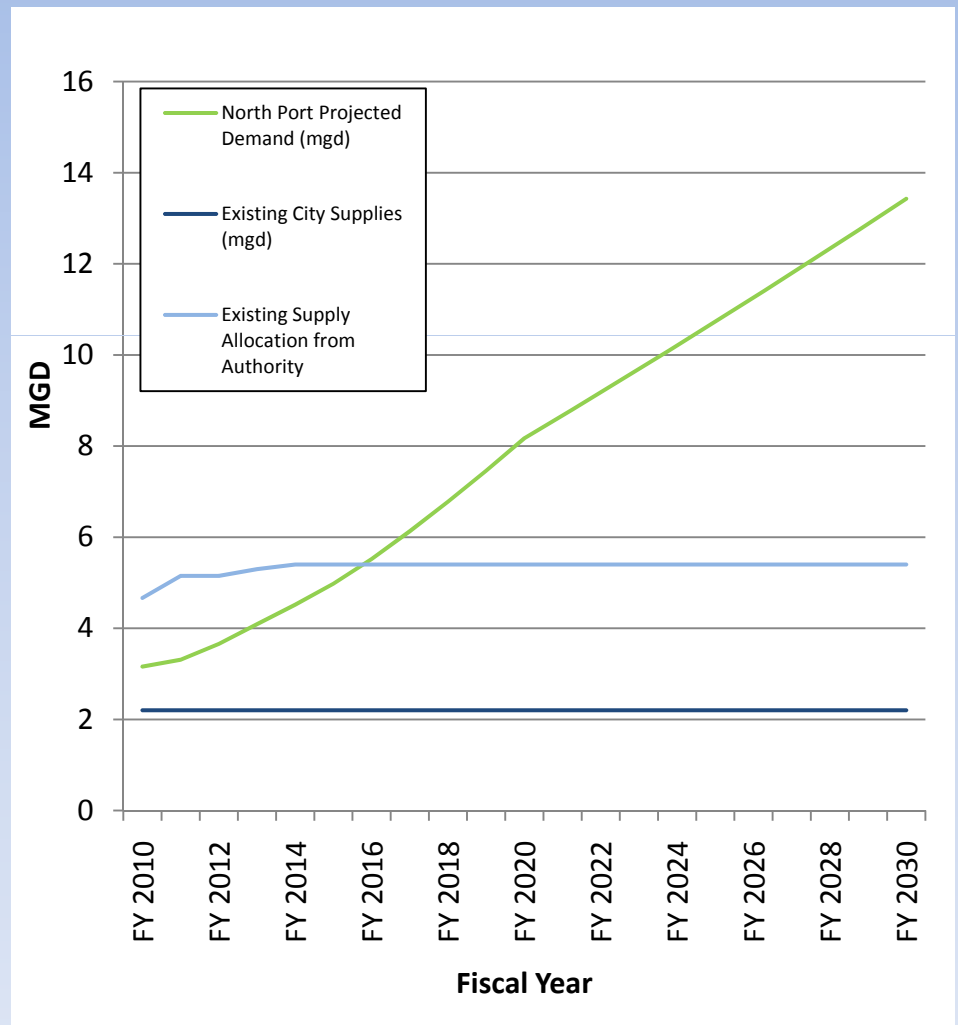
# North Port

- Demand Projections:
  - 2011 - - 3.31 mgd
  - 2030 - - 13.43 mgd
- Current Supply
  - 2.2 mgd City Facility



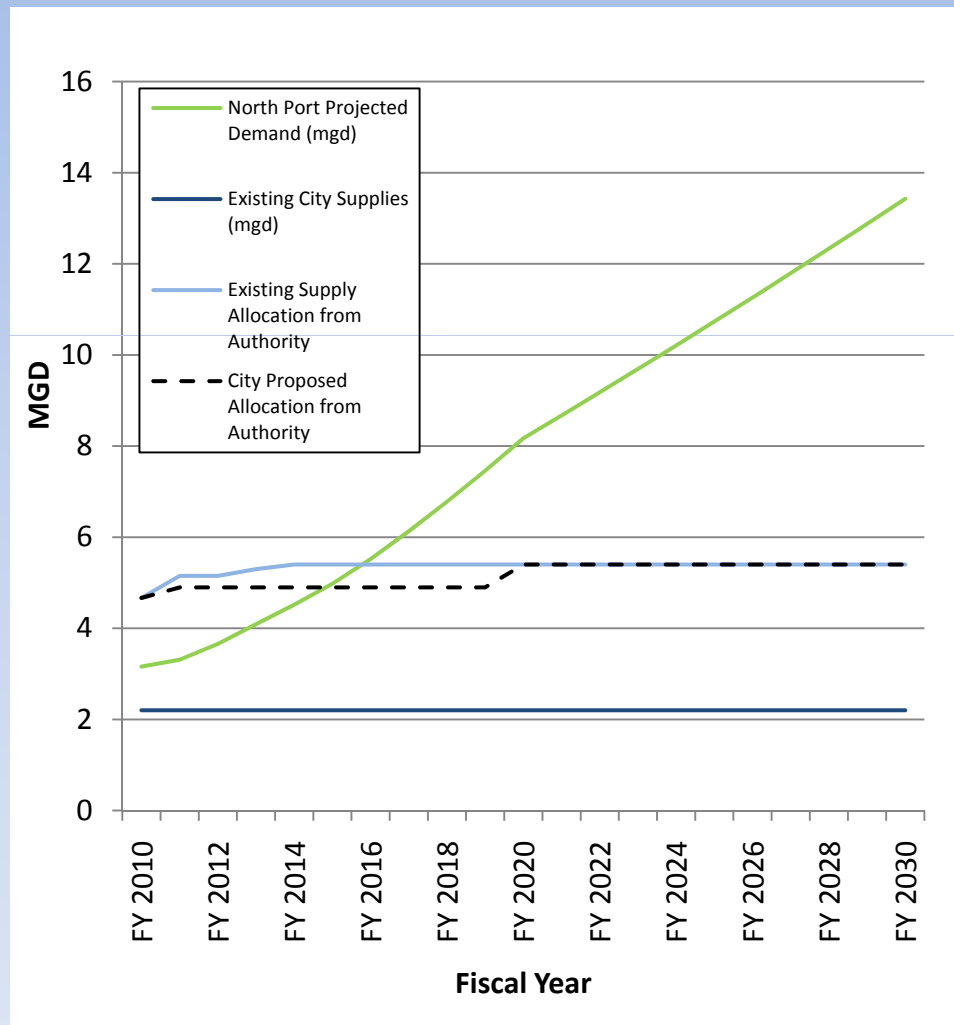
# North Port

- Demand Projections:
  - 2011 - - 3.31 mgd
  - 2030 - - 13.43 mgd
- Current Supply
  - 2.2 mgd City Facility
  - 2.7 mgd Authority (PRF)
  - 0.25 to 0.5 mgd Exhibit C



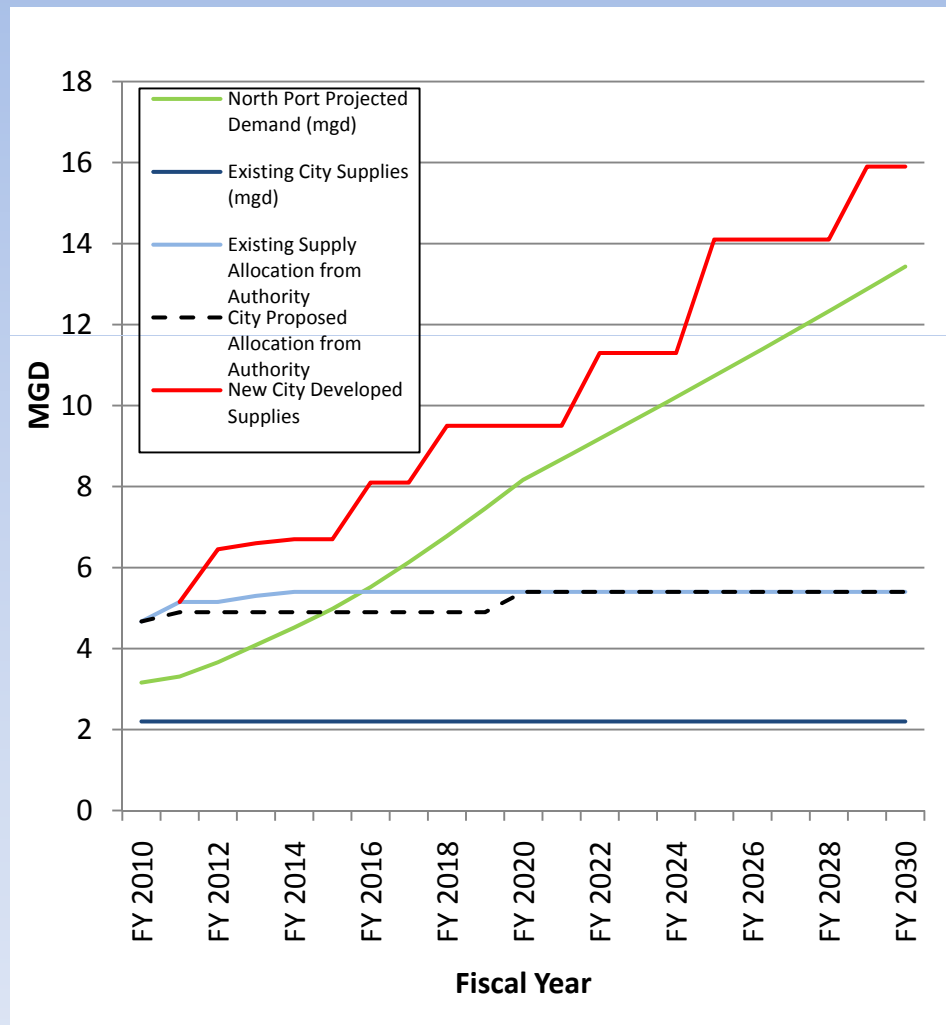
# North Port

- Demand Projections:
  - 2011 - - 3.31 mgd
  - 2030 - - 13.43 mgd
- Current Supply
  - 2.2 mgd City Facility
  - 2.95 – 3.10 mgd Authority
- 2010 Request:
  - Eliminate Exhibit C Quantities
  - Increase Supply from Authority by 0.5 mgd 2020



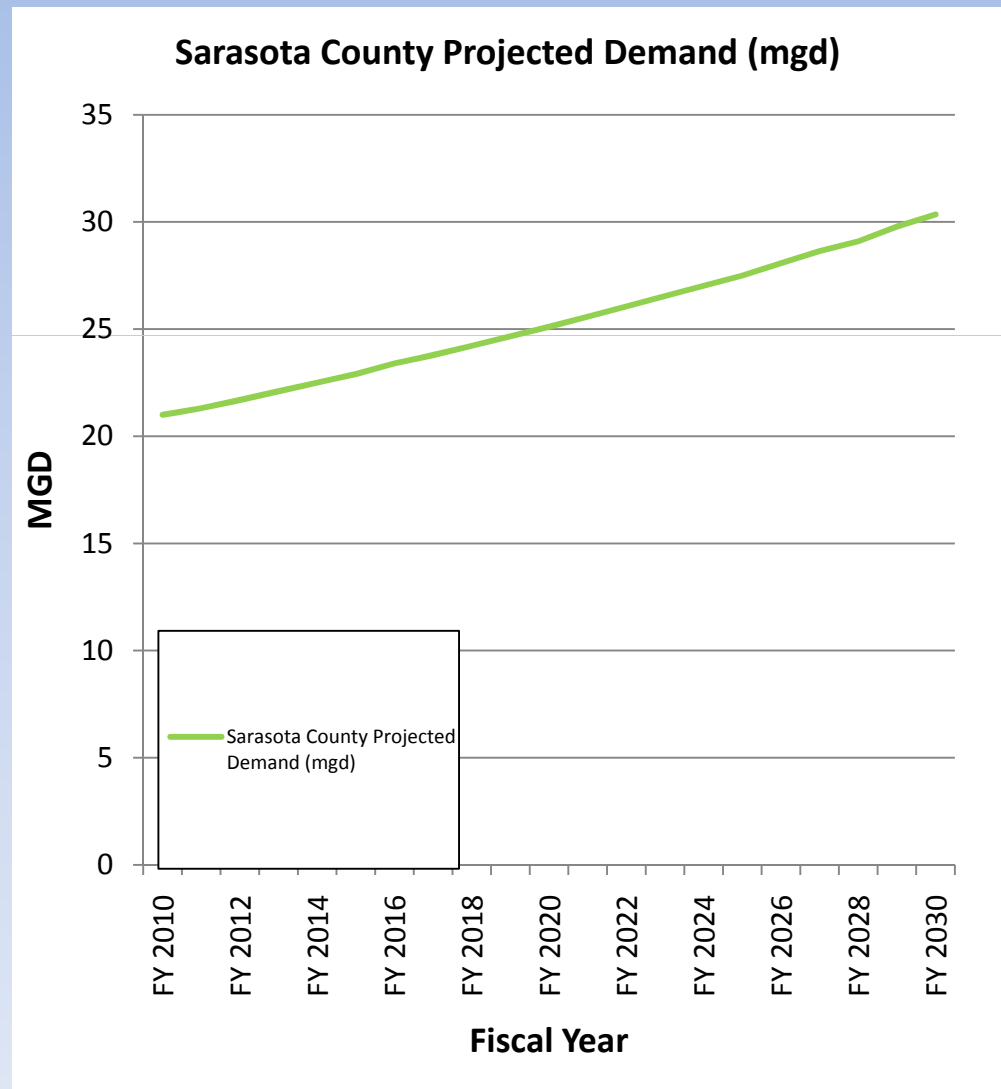
# North Port

- Demand Projections:
  - 2011 - - 3.31 mgd
  - 2030 - - 13.43 mgd
- Current Supply
  - 2.2 mgd City Facility
  - 2.95 – 3.10 mgd Authority
- 2010 Request:
  - Eliminate Exhibit C Quantities
  - Increase Supply from Authority by 0.5 mgd 2020
- New City Developed Supplies:
  - 2012-2030: 10.5 mgd



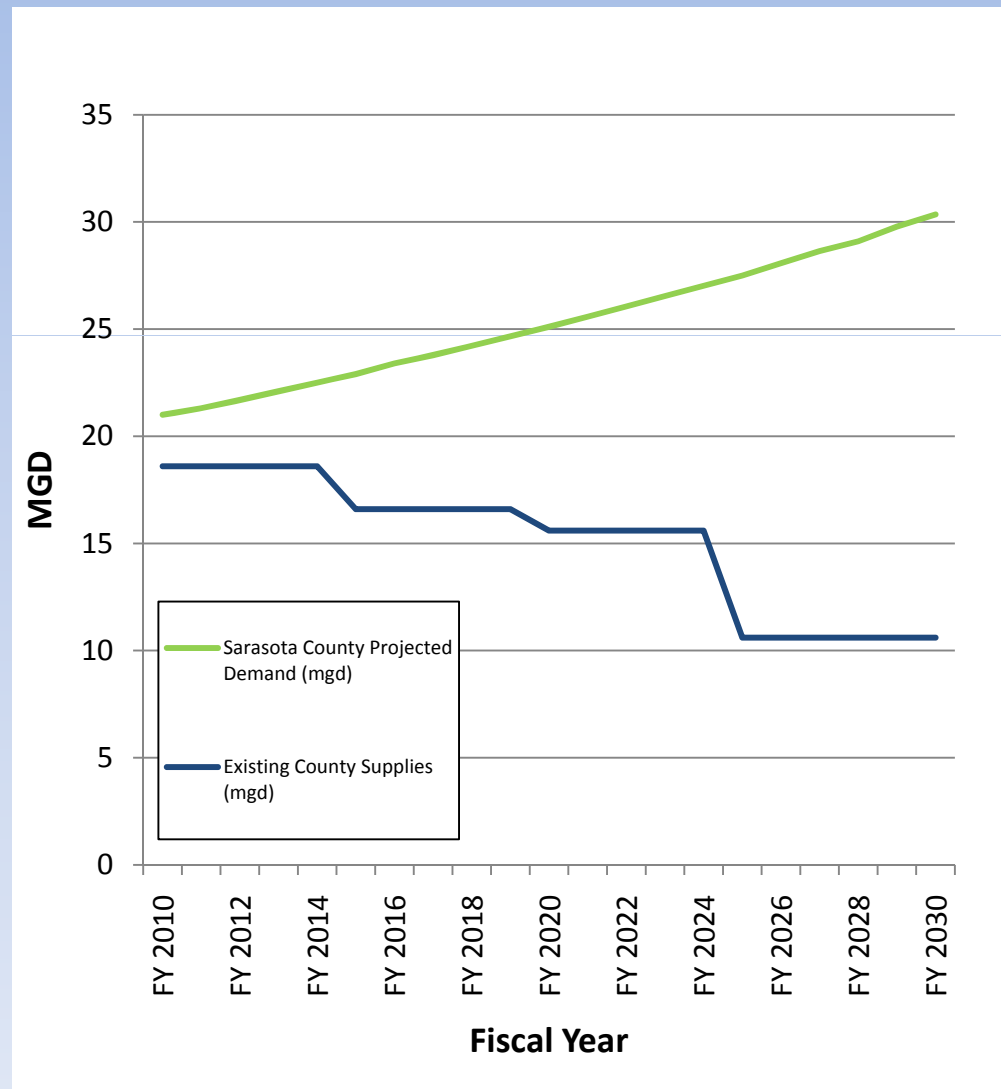
# Sarasota County

- Demand Projections:
  - 2011 - - 21.3 mgd
  - 2030 - - 30.35 mgd



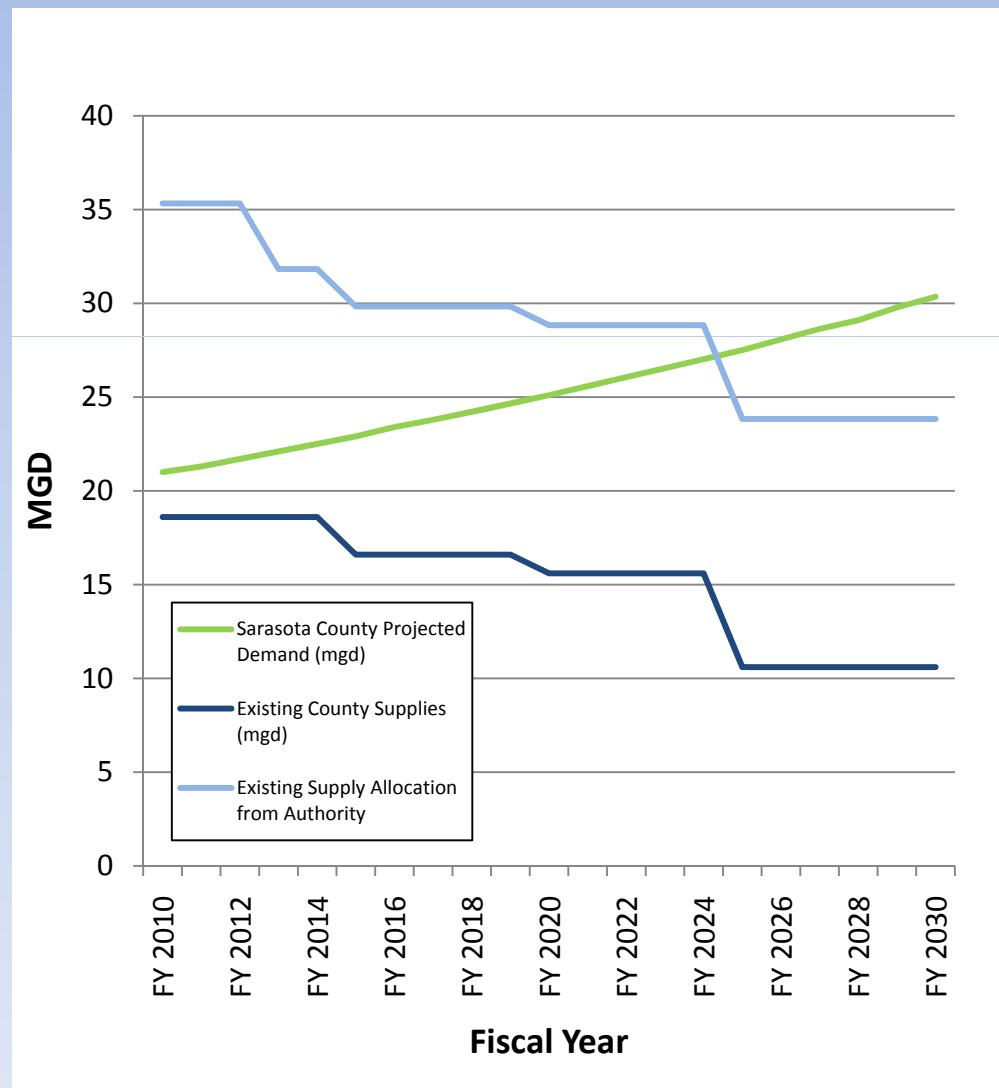
# Sarasota County

- Demand Projections:
  - 2011 - - 21.3 mgd
  - 2030 - - 30.35 mgd
- Current Supplies
  - 18.6 mgd County



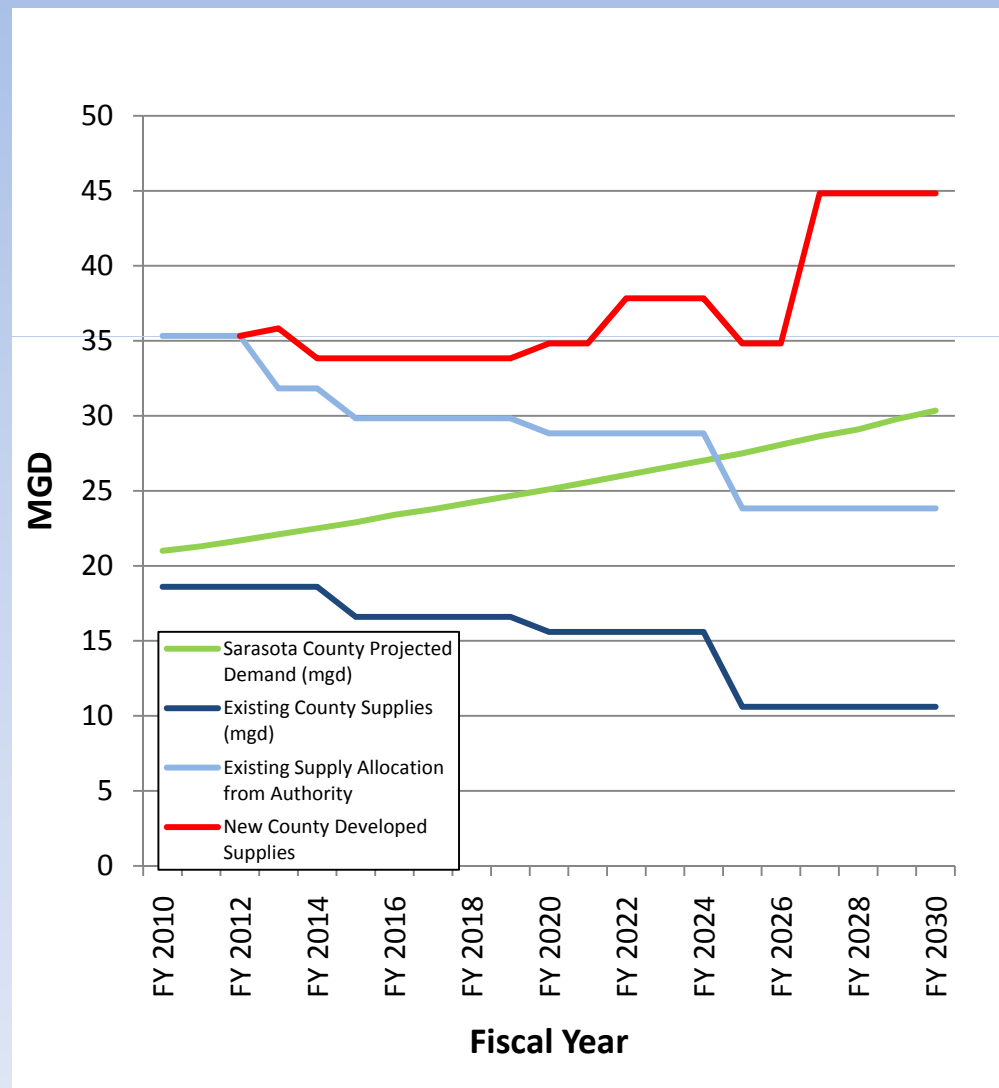
# Sarasota County

- Demand Projections:
  - 2011 - - 21.3 mgd
  - 2030 - - 30.35 mgd
- Current Supplies
  - 18.6 mgd County
  - 4 mgd Authority CWUP
  - 13.23 mgd Authority





# Sarasota County

- Demand Projections:
  - 2011 - - 21.3 mgd
  - 2030 - - 30.35 mgd
- Current Supplies
  - 18.6 mgd County
  - 13.23 mgd Authority
- New Supplies:
  - 2013: 4 mgd (Recapture from CWUP)
  - 2020-2030: 17 mgd (County)



# Customer Demand & Supply

- Regional Demands Increase @ 2%/Year
  - 2011 Customer Demand - - 76 mgd
  - 2030 Customer Demand - - 113 mgd

37 mgd
- Regional Supply Increase
  - 2011 Supply Total 99 mgd
  - 2030 Supply Total 142 mgd

43 mgd

  - 29 mgd in Customer Developed Supplies
  - 14 mgd in Authority Developed Supplies

# Potential Pool Water

Fiscal Year	Charlotte Potential Pool Water (mgd)	Sarasota Co. Declared Pool Water (mgd)	Total Potential Pool Water (mgd)
FY 2011	3.06	8.70	11.76
FY 2012	2.82	8.20	11.02
FY 2013	2.57	8.30	10.87
FY 2014	2.33	7.80	10.13
FY 2015	2.07	5.30	7.37
FY 2016	1.80	4.80	6.60
FY 2017	1.52	4.20	5.72
FY 2018	1.24	3.70	4.94
FY 2019	0.96	3.20	4.16
FY 2020	0.68	3.70	4.38

# Regional Supply Development 2011 - 2030

Year	Min. Rotational Capacity Recomm. (mgd)	PRMRWSA Supply Surplus or (Deficit) (mgd)	Supply Dev. Schedule
2011	4.6	9.3	No New Supply Needed
2012	4.6	10.2	
2013	4.7	6.5	
2014	4.8	4.0	
2015	4.9	1.2	
2016	5.0	0.6	
2017	5.1	0.0	
2018	5.2	(0.7)	New 3 mgd
2019	5.3	(1.3)	
2020	5.4	(1.0)	
2021	5.5	(4.8)	New 3 mgd (cumulative 6 mgd)
2022	5.7	(4.9)	
2023	5.8	(5.0)	
2024	5.9	(5.1)	
2025	6.0	(5.3)	
2026	6.2	(5.4)	
2027	6.3	(5.6)	
2028	6.5	(5.7)	
2029	6.6	(5.8)	
2030	6.8	(11.0)	New 8 mgd (cumulative 14 mgd)

# Conclusions 2011 - 2030

- Existing regional capacity + pool water commitment is adequate to meet regional needs until 2018
- New supply development is required to maintain rotational supply by 2018
- Discussions with Charlotte County on pool water commitment could push new water development out
- New regional sources totaling 14 mgd are needed by 2030. SWFS projects available to meet that need.