

UPPER FLINT

Upper Flint Council Meeting

August 24, 2022



**GEORGIA
WATER PLANNING**

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Agenda

Objectives:

1. *Review and discuss surface water availability assessment results*
2. *Review and discuss revisions to management practices and recommendations*
3. *Consider revisions to recommendations from Plan Review & Inter-Council Coordination Committees*
4. *Discuss schedule for remaining plan revisions and meetings*

10:00	Welcome, Agenda Review, ARP Project Update – Mark Masters (GWPPC)
10:10	Chair's Report – Chairman Chase
10:20	New Planning Timeline – Meagan Szydzik (GWPPC)
10:30	Summary from last meeting – Courtney Cooper (GWPPC)
10:40	EPD Update, Seed Grants – Johanna Smith (GAEPD)
10:50	Orientation to goals for afternoon group discussions – Courtney Cooper (GWPPC)
11:00	Surface Water Availability Assessment Results – Mark Masters (GWPPC) & Wei Zeng (GAEPD)
12:00	Lunch
1:00	Small Group Discussion: Surface Water Availability Assessment
2:00	Water Quantity Committee report on revised recommendations – Raines Jordan
2:20	Water Quality Committee report on revised recommendations – Beth English
2:40	Break
2:50	Inter-Council Coordination Committee report on revised joint recommendations – Donald Chase
3:05	Full group discussion and report back
3:50	Next Steps in Plan Review and Revision – Meagan Szydzik (GWPPC)
4:00	Adjourn



Introductions

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Upper Flint Council Members

Name	City	County
Brian Belcher	Ellaville	Schley
Barry Blount	Americus	Sumter
Michael Bowens	Vienna	Dooly
Gene Brunson	Reynolds	Taylor
Thomas Burnsed	Meansville	Pike
Donald Chase, Chair	Oglethorpe	Macon
Brad Ellis	Vienna	Dooly
Beth English	Vienna	Dooly
Steve Fry	Williamson	Pike
Adam L. Graft	Americus	Sumter
Rodney H. Hilley	Molena	Pike
Jack Holbrook (Alternate)	Preston	Webster
Terrell Hudson	Unadilla	Dooly
Raines Jordan, Vice Chair	Talbotton	Talbot
Brant Keller (Alternate)	Griffin	Spalding
Bob Melvin	Oglethorpe	Macon
Kenneth L. Murphy	Gay	Meriwether
Sen. Ed Harbison (Ex-Officio)		

Name	City	County
Lamar Perlis	Cordele	Crisp
Gary Powell	Buena Vista	Marion
Jim Reid	Americus	Sumter
Gordon Rogers	Talbotton	Talbot
Charles Rucks	Brooks	Spalding
Bill Sawyer	Ellaville	Schley County
Larry Smith	Montezuma	Macon
Marcus South	Thomaston	Upson
Walter E. (Butch) Turner	Reynolds	Taylor
Brian Upson	Griffin	Spalding
George (Teel) Warbington (Alternate)	Vienna	Dooly
Rodney Wilson	Zebulon	Pike
Benjamin (Joel) Wood	Cordele	Crisp
Ben Haugabook		Macon



Chair's Report

Presented by Chairman Chase



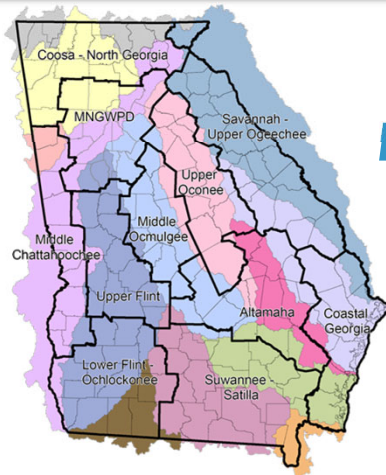
New Planning Timeline

Meagan Szydzik



Regional Water Plan Update

Regional Water Plan Review and Revision Schedule



EPD targeted date of adoption of revised Regional Water Plan by June 2023



Previous Meeting Summary

Courtney Cooper



Previous Meeting Summary

- Reviewed additional water resource assessment results
- Reviewed and discussed management practices and recommendations
- Considered recommendations from Plan Review & Inter-Council Coordination Committees
- Learned about recent studies on water system interconnectivity and biosolids management



EPD Update, Seed Grants

Johanna Smith, GAEPD



FY23 RWP Seed Grant Program

- EPD made grant announcement on July 7
- Funding for projects that implement Regional Water Plan management practices/recommendations
- Letter of endorsement from Council Chair
- Up to \$75,000 state funding available (per project)
- Cost-Share: 60% state /40% match (with at least 10% cash match)
- Pre-application meeting & application deadlines in October

EXAMPLE IN-KIND MATCH SERVICES

- ✓ Personnel/Staff Salaries
- ✓ Professional Fees
- ✓ Labor
- ✓ Supplies & Materials
- ✓ Equipment (Leases or Purchases)
- ✓ Office / Meeting Space Rent
- ✓ Indirect Charges
- ✓ Volunteer Hours



Seed Grant History & Awards

- Since State Fiscal Year 2014, EPD has awarded \$1,966,900 in state funds to Seed Grant projects
- Projects support implementation of Regional Water Plans
- In the **Upper Flint** region, \$176,000 of state funds have been awarded towards 3 total seed grant projects
 - Including match, the total project spending is \$296,000



Seed Grant Projects in this Region

- FY14 seed grant to Albany State GWPPC
 - “Water Supply Alternatives Development Plan for Agricultural Irrigators in Ichawaynochaway Sub-Basin (HUC 03130009)”
- FY18 seed grant to Two Rivers RC&D
 - “Microbial Source Tracking for Species Identification in the Ulcohatchee Creek Watershed”
- FY18 seed grant to UGA/Stripling Irrigation Research Park
 - “Innovative Ag Irrigation Scheduling Tools for Increasing Water Use Efficiency in the Lower Flint-Ochlocknee and the Upper Flint Regional Water Council Areas”
- FY21 seed grant to University of Georgia
 - “Pike County Plans for the Future by Building on the Upper Flint Regional Water Plan”



More Information on Seed Grants



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More Information

Funding Opportunities

Partnering Agencies

Latest News

Funding Opportunities

Partnering Agencies

Latest News

Funding Opportunities

Regional Water Planning Seed Grants

From State Fiscal Year 2023 funds appropriated by the Georgia General Assembly for Regional Water Planning, EPD announces the SFY2023 Regional Water Plan Seed Grant program. The Regional Water Plan Seed Grants are being provided to support and incentivize local governments and other water users as they undertake their [Regional Water Plan](#) implementation responsibilities.



Upper Flint Region: Public Outreach

- Friday, Aug. 5 Americus Kiwanis Club Meeting
 - Thanks to Adam Graft for attending!
 - Provided overview of Georgia EPD and State Water Planning process
 - Future public outreach opportunities are highly encouraged for council members



Orientation to goals for afternoon group discussions

Courtney Cooper



Small group discussions

- What are your primary takeaways from the water availability assessment?
 - What implications do they have for you?
- Are there any new issues not yet reflected in the recommendations?
 - Do the results mesh with the revised plan recommendations?
- What else do you want to know about water availability?
 - Are there other metrics that you would like to see?
- If you had sufficient funds, what water-related projects would you prioritize over the next 5 years?
- Discuss any unsettled committee items



Surface Water Availability Assessment Results

Mark Masters & Wei Zeng



Presentation Outline

- Introduction and Model Settings
- Model Results
 - Water Supply Challenges
 - Wastewater Assimilation Challenges
 - Carsonville Flow Results



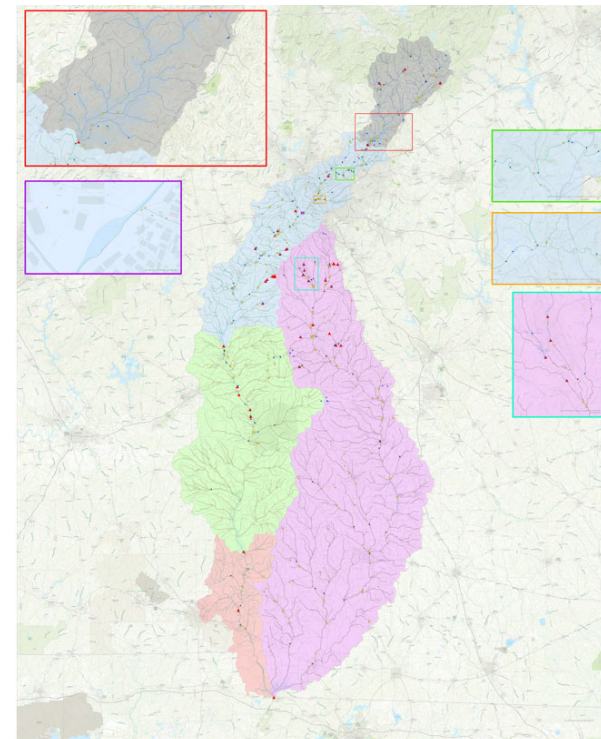
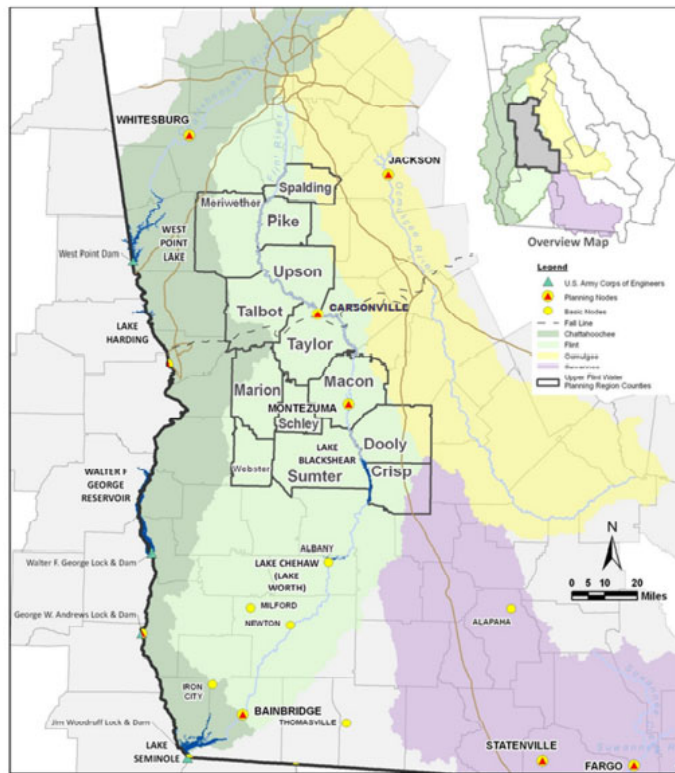
Upper Flint Region Metrics

Water Supply Availability	% model period with water supply challenge
	Total volume of shortage
	Shortage volume in 2007-2008 drought
	Shortage volume in 2011-2012 drought
Wastewater Discharge Assimilation	% model period with wastewater assimilation challenge
	Total volume of shortage
Lake Elevation	N/A
Streamflow	Carsonville - 100 cfs
	Carsonville - 600 cfs

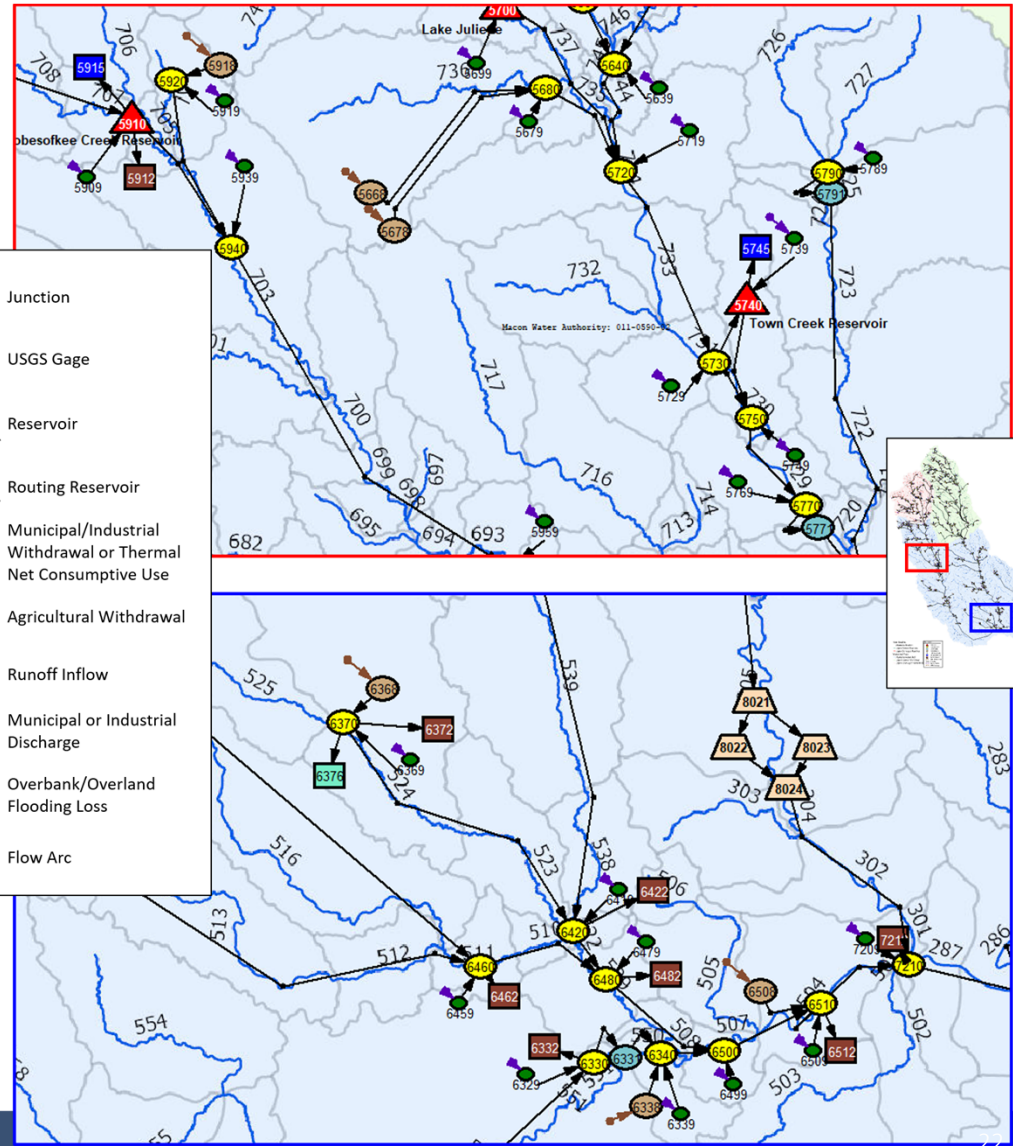
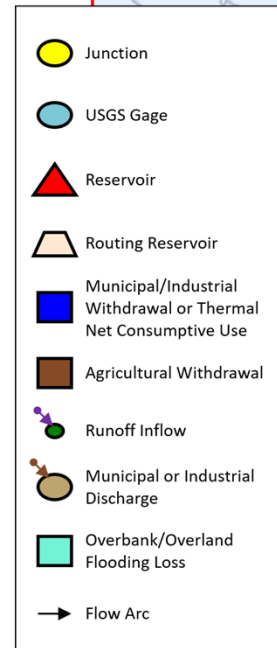
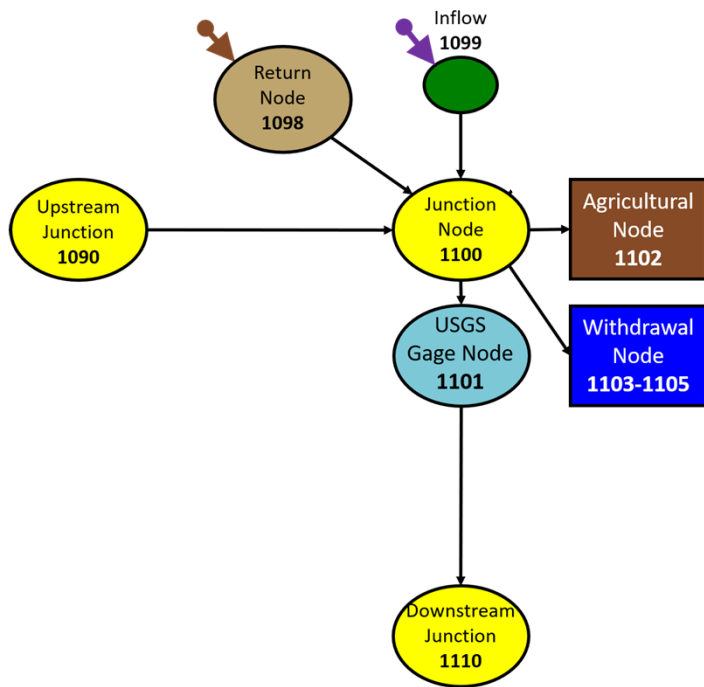
Does the Council have additional metrics to consider?



Upper Flint Region and ACF Model Domain



BEAM Node Types



ACF Baseline & Future Scenarios Settings

Simulation Period	1939 – 2018 (model period includes various hydrologic conditions)
Withdrawal and Discharge Amounts	4 Scenarios <ul style="list-style-type: none"> ■ Baseline: Average water and wastewater demands for 2010-2018 ■ Baseline Drought: 2011 demands ■ Forecast (ag constant): 2060 demands but agriculture held constant at baseline ■ Forecast (ag growth): 2060 demands with agriculture 2060 forecast
Instream Flow Protection Thresholds	Per permit conditions
Reservoir physical and operational data	From reservoir owner or GAEPD

Water & Wastewater Facilities Analyzed in the Upper Flint Region

	Facility Type	Analyzed (# of facilities)	Challenge Indicated (# of facilities)
Water Withdrawals	Municipal	10	4
	Industrial	5	3
	Energy	0	0
Wastewater Discharges	Municipal	16	11
	Industrial	1	0

Note: Energy withdrawals are expressed as consumptive uses in modeling.

Facilities With Water Supply Challenges (page 1)

Scenario		Covia Holdings Corp.	Southern Mills, Inc.	Roosevelt Warm Springs Institute	City of Warm Springs
BEAM Node		4525	6825	6884	6885
Waste Supply Challenge (% Days)	Baseline	0.06%	4.9%	0.4%	0.02%
	Baseline Drought	0.05%	4.3%	0.2%	0.0%
	Forecast (ag constant)	0.06%	4.9%	1.2%	0.3%
	Forecast (ag growth)	0.05%	4.9%	1.2%	0.3%
Shortage Volume (million gallons)	Baseline	1.0 <i>2007-08 drought: 0 2011-12 drought: 0</i>	283 <i>2007-08 drought: 34 2011-12 drought: 61</i>	11 <i>2007-08 drought: 3 2011-12 drought: 4</i>	0.1 <i>2007-08 drought: 0 2011-12 drought: 0</i>
	Baseline Drought	0.7 <i>2007-08 drought: 0 2011-12 drought: 0</i>	232 <i>2007-08 drought: 38 2011-12 drought: 52</i>	3 <i>2007-08 drought: 1 2011-12 drought: 1</i>	0 <i>2007-08 drought: 0 2011-12 drought: 0</i>
	Forecast (ag constant)	1.0 <i>2007-08 drought: 0 2011-12 drought: 0</i>	283 <i>2007-08 drought: 38 2011-12 drought: 61</i>	68 <i>2007-08 drought: 15 2011-12 drought: 14</i>	12 <i>2007-08 drought: 4 2011-12 drought: 5</i>
	Forecast (ag growth)	1.0 <i>2007-08 drought: 0 2011-12 drought: 0</i>	283 <i>2007-08 drought: 38 2011-12 drought: 61</i>	68 <i>2007-08 drought: 15 2011-12 drought: 14</i>	12 <i>2007-08 drought: 4 2011-12 drought: 5</i>

Facilities With Water Supply Challenges (page 2)

Scenario		City of Manchester	City Of Thomaston	Covia Financial Corporation
BEAM Node		7045	7195	7555
Waste Supply Challenge (% Days)	Baseline	15.8%	3.1%	0.1%
	Baseline Drought	15.9%	3.3%	0.1%
	Forecast (ag constant)	9.5%	2.5%	0.1%
	Forecast (ag growth)	9.5%	2.3%	0.1%
Shortage Volume (million gallons)	Baseline	3,763 <i>2007-08 drought: 326 2011-12 drought: 426</i>	1,584 <i>2007-08 drought: 354 2011-12 drought: 301</i>	11 <i>2007-08 drought: 0 2011-12 drought: 0</i>
	Baseline Drought	3,830 <i>2007-08 drought: 331 2011-12 drought: 434</i>	1,642 <i>2007-08 drought: 379 2011-12 drought: 327</i>	17 <i>2007-08 drought: 0 2011-12 drought: 0</i>
	Forecast (ag constant)	907 <i>2007-08 drought: 100 2011-12 drought: 129</i>	815 <i>2007-08 drought: 202 2011-12 drought: 146</i>	10 <i>2007-08 drought: 0 2011-12 drought: 0</i>
	Forecast (ag growth)	907 <i>2007-08 drought: 100 2011-12 drought: 129</i>	738 <i>2007-08 drought: 189 2011-12 drought: 142</i>	10 <i>2007-08 drought: 0 2011-12 drought: 0</i>

Facilities With Wastewater Assimilation Challenges

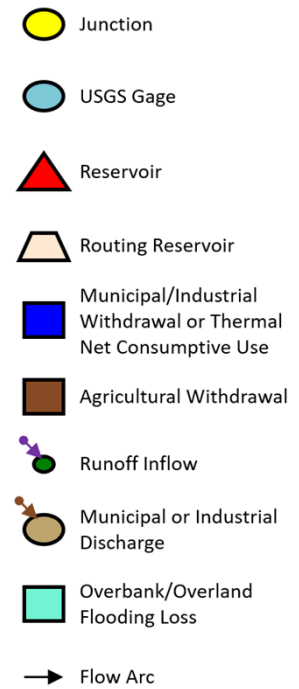
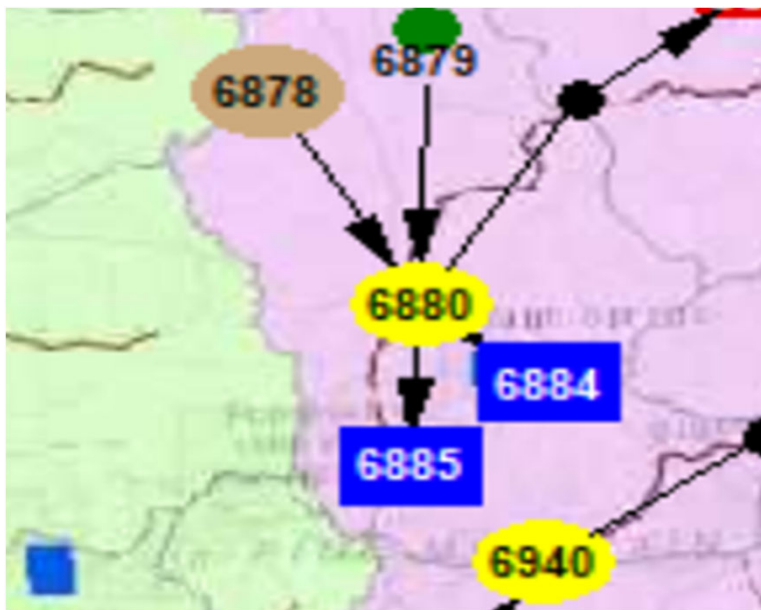
		Concord: South WPCP	City of Warm Springs WPCP	Thomaston: Bell Creek WPCP	Reynolds WPCP	Taylor Cty: Plant Laurel WPCP	Buena Vista WPCP	Byromville WPCP	Cordele: Gum Creek WPCP	Ellaville WPCP-1 (GA0050105)	Ellaville WPCP-2 (GA0047767)	Ellaville WPCP-3 (GA0020931)
BEAM Node		6798	6878	7218	7318	7498	7618	7728	7768	7848	7878	7978
7Q10 Flow (cfs)		3.76	0.64	13.47	33.39	4.86	1.29	2.85	2.56	0.03	10.54	0.11
Wastewater Challenge (% Days)	Baseline	2.4%	1.1%	2.0%	1.1%	0.3%	0.0%	8.4%	2.6%	0.05%	0.7%	0.0%
	Baseline Drought	2.7%	0.7%	2.3%	1.2%	0.3%	0.0%	16.0%	4.4%	0.1%	3.2%	0.01%
	Forecast (ag constant)	2.4%	1.6%	1.6%	1.1%	0.3%	0.0%	8.4%	2.6%	0.05%	0.7%	0.0%
	Forecast (ag growth)	2.2%	1.6%	1.5%	1.2%	0.3%	0.0%	18.2%	4.8%	0.1%	1.1%	0.0%
Shortage Volume (million gallons)	Baseline	836	76	1,380	2,024	92	0	1,716	1,460	1	657	0
	Baseline Drought	977	45	1,905	2,075	117	0	4,590	2,604	1	4,423	0.3
	Forecast (ag constant)	836	147	1,003	2,024	92	0	1,713	1,436	2	638	0
	Forecast (ag growth)	762	147	825	2,042	100	0	5,924	2,965	5	1359	0

WPCP=Water Pollution Control Plant²⁷

Carsonville Flow Summary		Metric	
		100 cfs	600 cfs
% Days Below Metric	Scenario		
	Baseline	0.26%	22.6%
	Baseline Drought	0.44%	23.0%
	Forecast (ag constant)	0.044%	23.7%
	Forecast (ag growth)	0.034%	23.6%

Water Supply Challenge Example 1

- Permit holder: City of Warm Springs
- Permit 099-1106-07, BEAM Node 6885
- Withdrawal limits: 0.33 mgd (daily)/0.24 mgd(monthly)

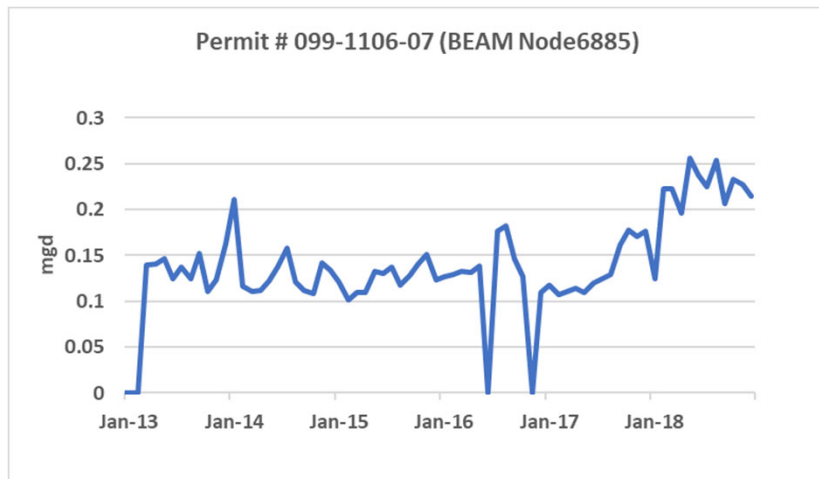


City of Warm Springs

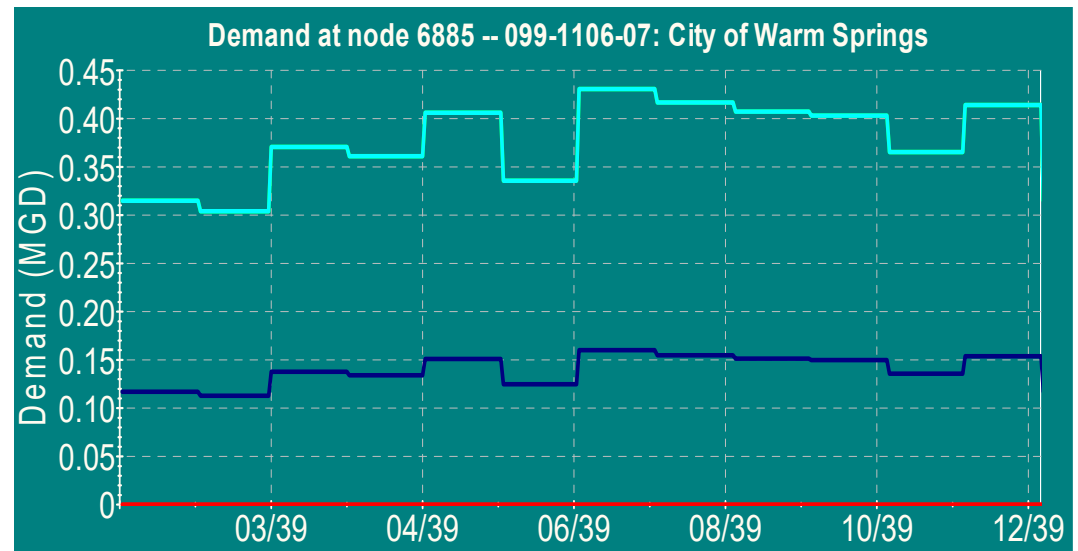
Permit 099-1106-07

Withdrawal Amount Setting

Average of 2010-2018

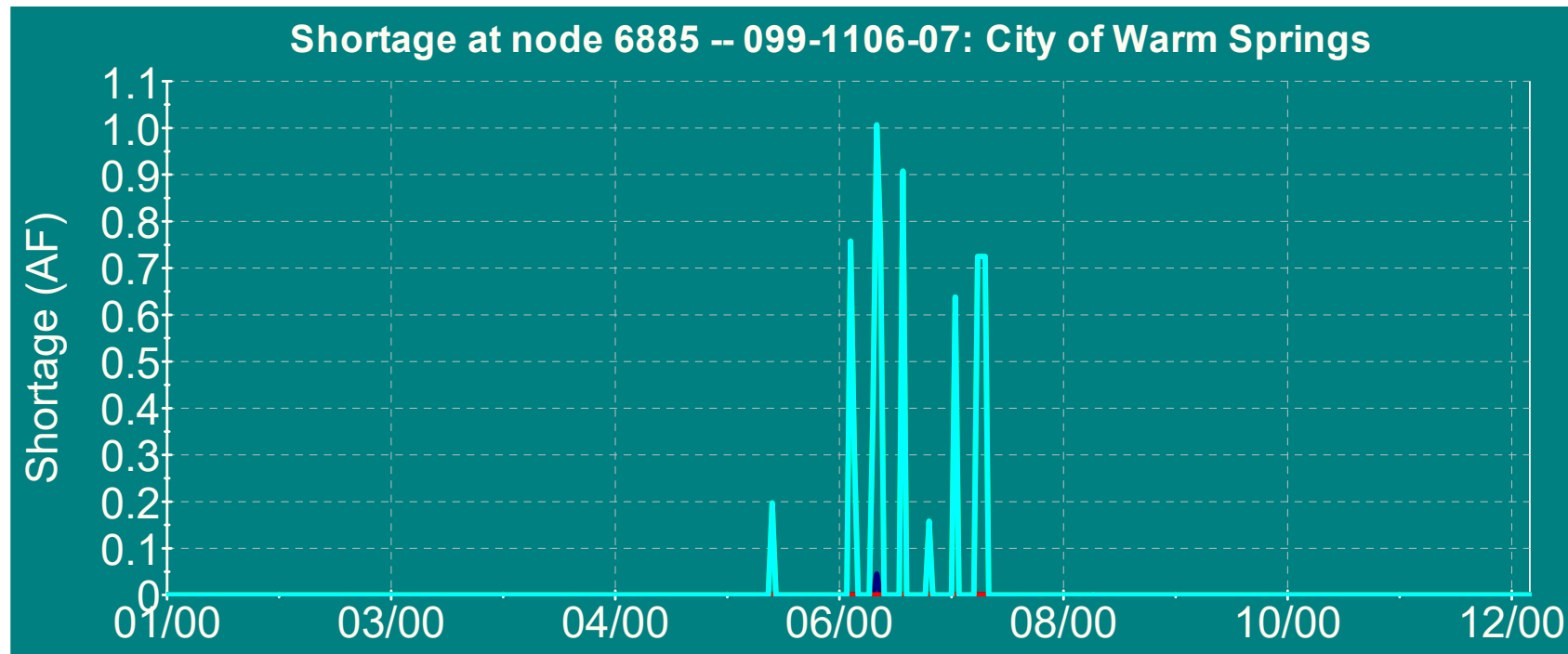


Baseline and Future Demand



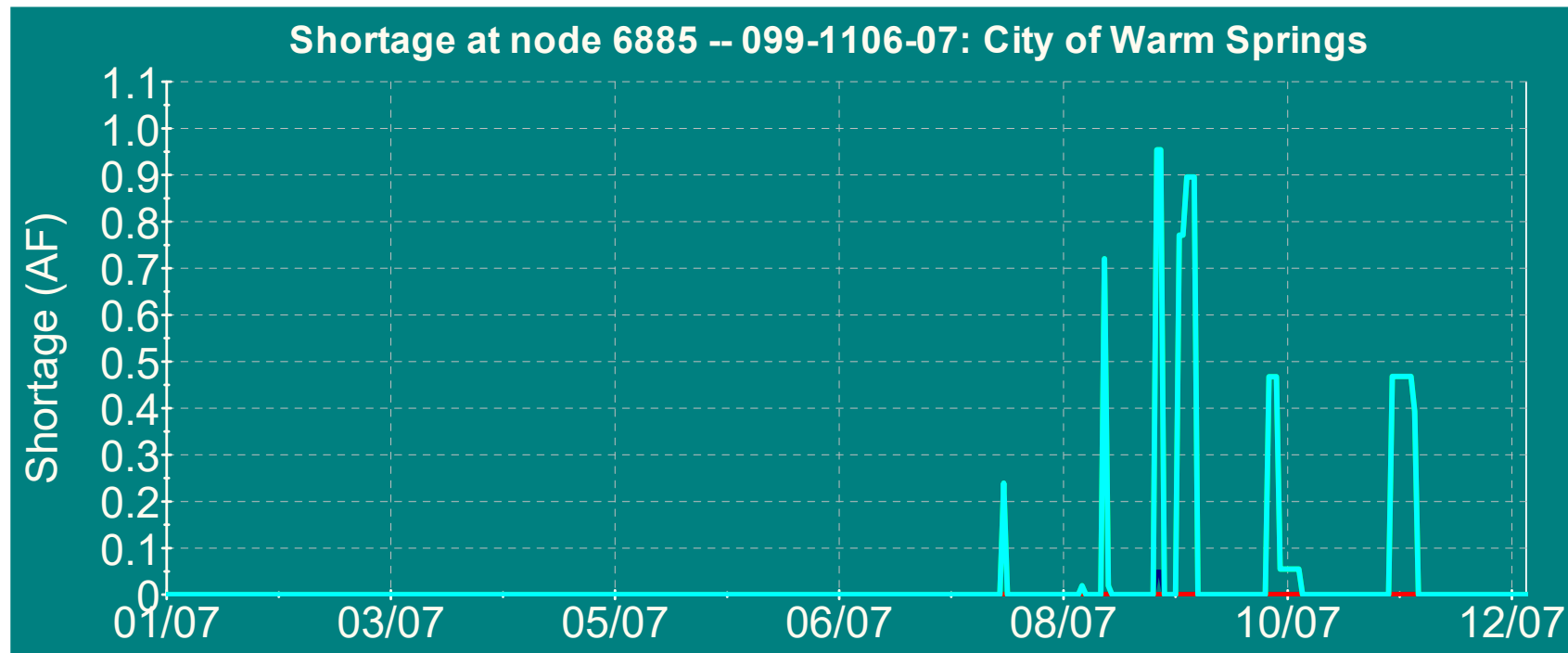
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Water Supply Challenge in 2000



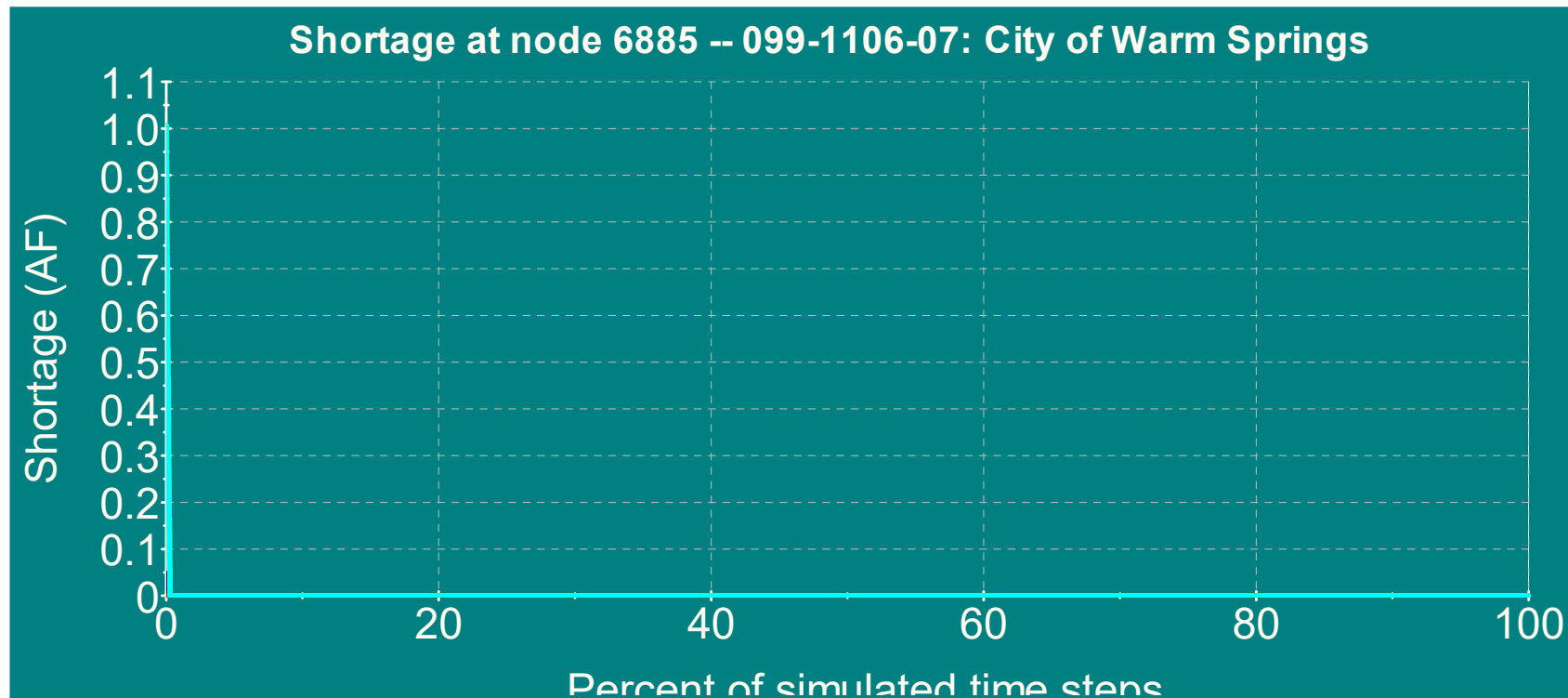
- **Baseline:** Average demands 2010-2018
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Water Supply Challenge in 2007



- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

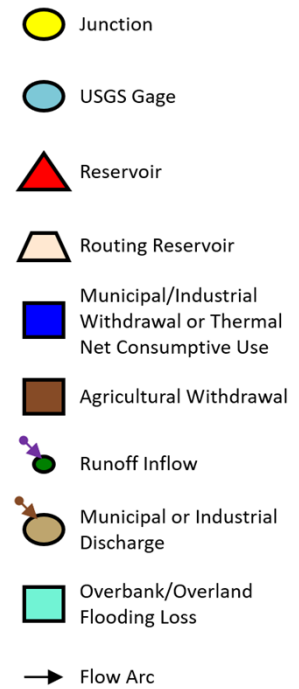
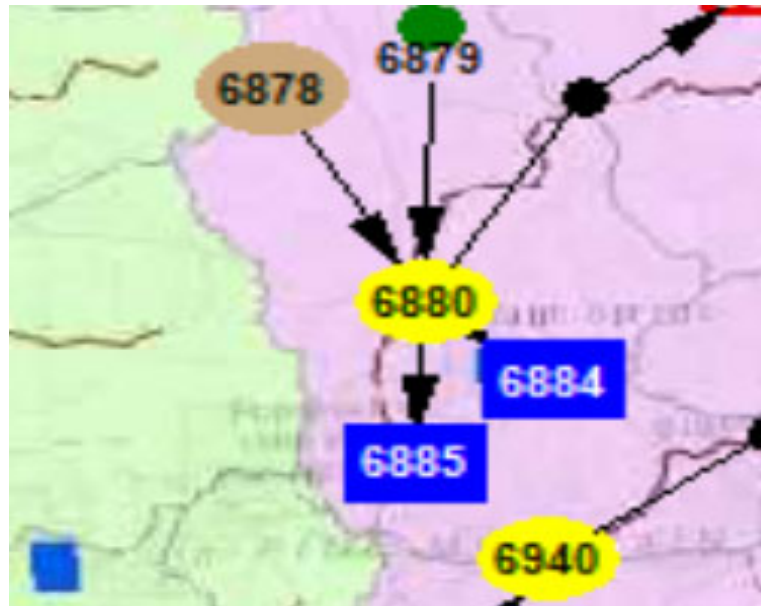
Water Supply Shortage Frequency in 1939-2018



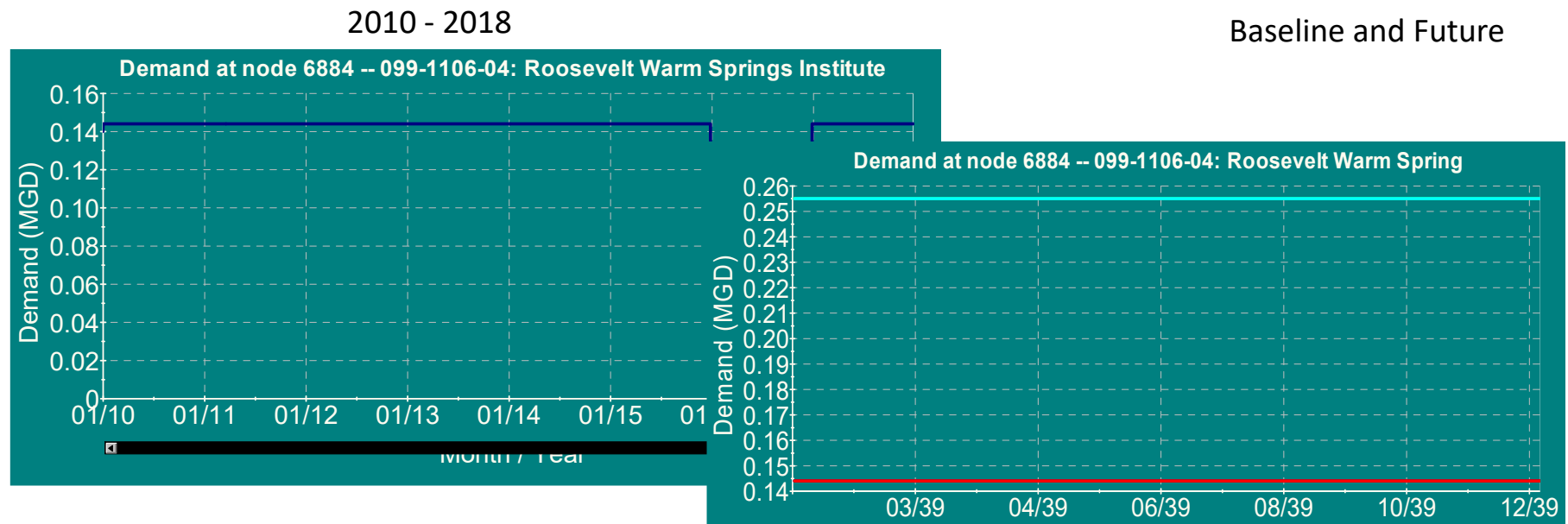
- **Baseline:** Average demands 2010-2018
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- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Water Supply Challenge Example 2

- Permit holder: Roosevelt Warm Springs Institute
- Permit 099-1106-04, BEAM Node 6884
- Withdrawal limits: 0.144 mgd (daily/monthly)
- Cascade Creek IFPT of 0.3 cfs (0.19 mgd)

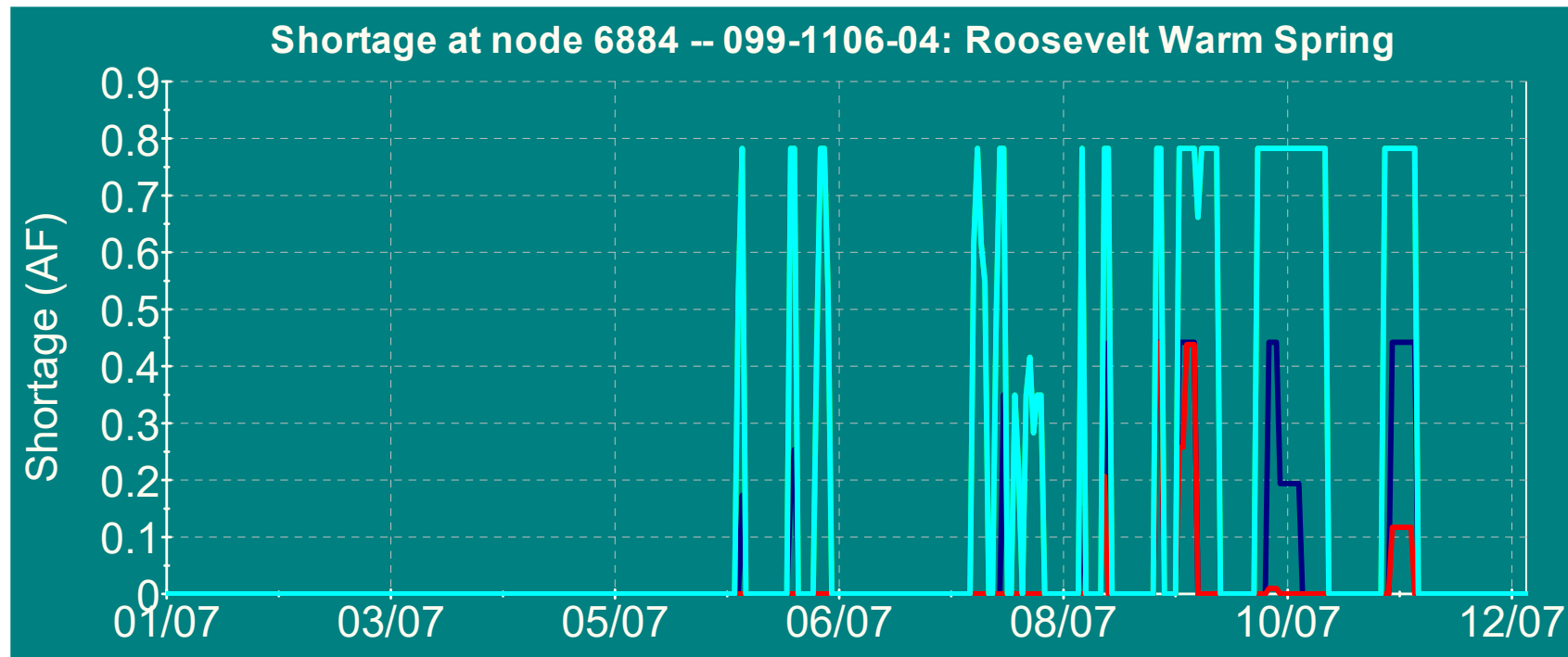


Roosevelt Warm Springs Institute (Permit 099-1106-07): Withdrawal Amount Setting-average of 2010-2018 and 2060 projection



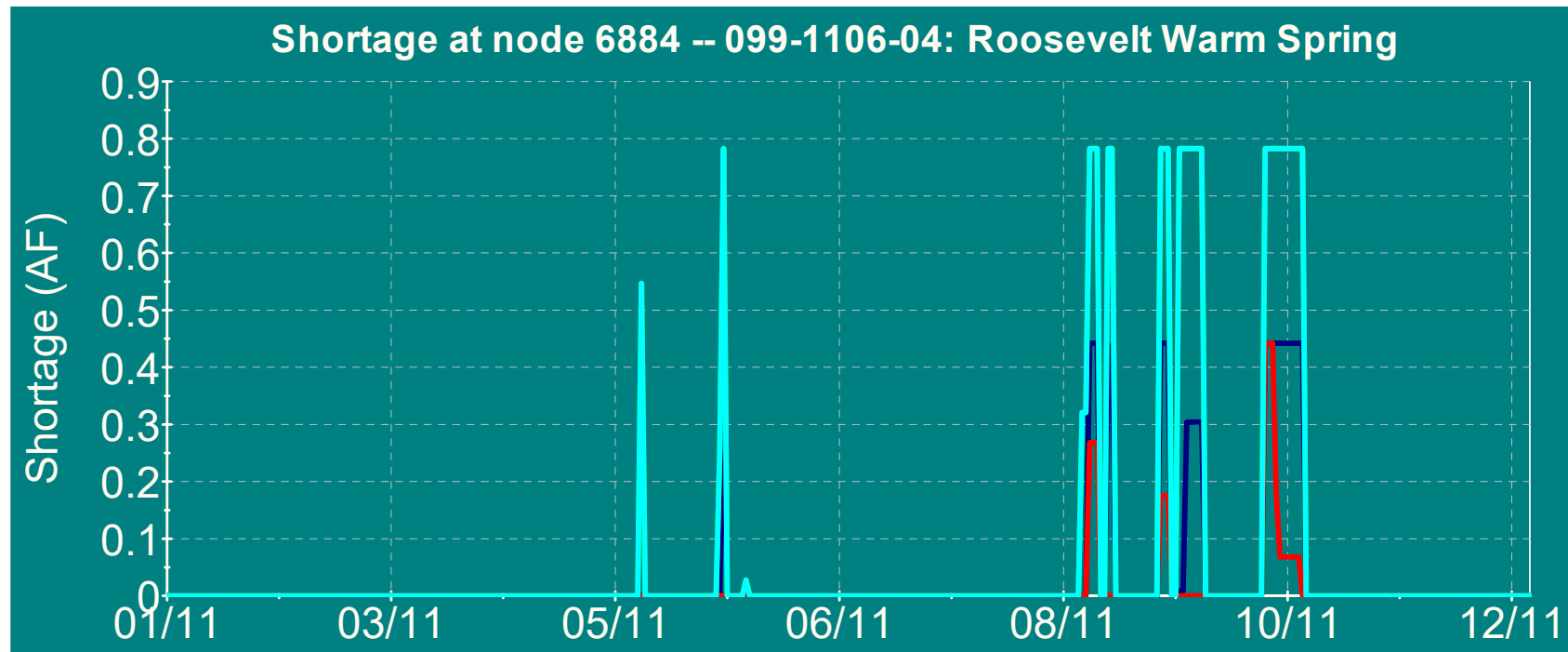
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Water Supply Challenge in 2007



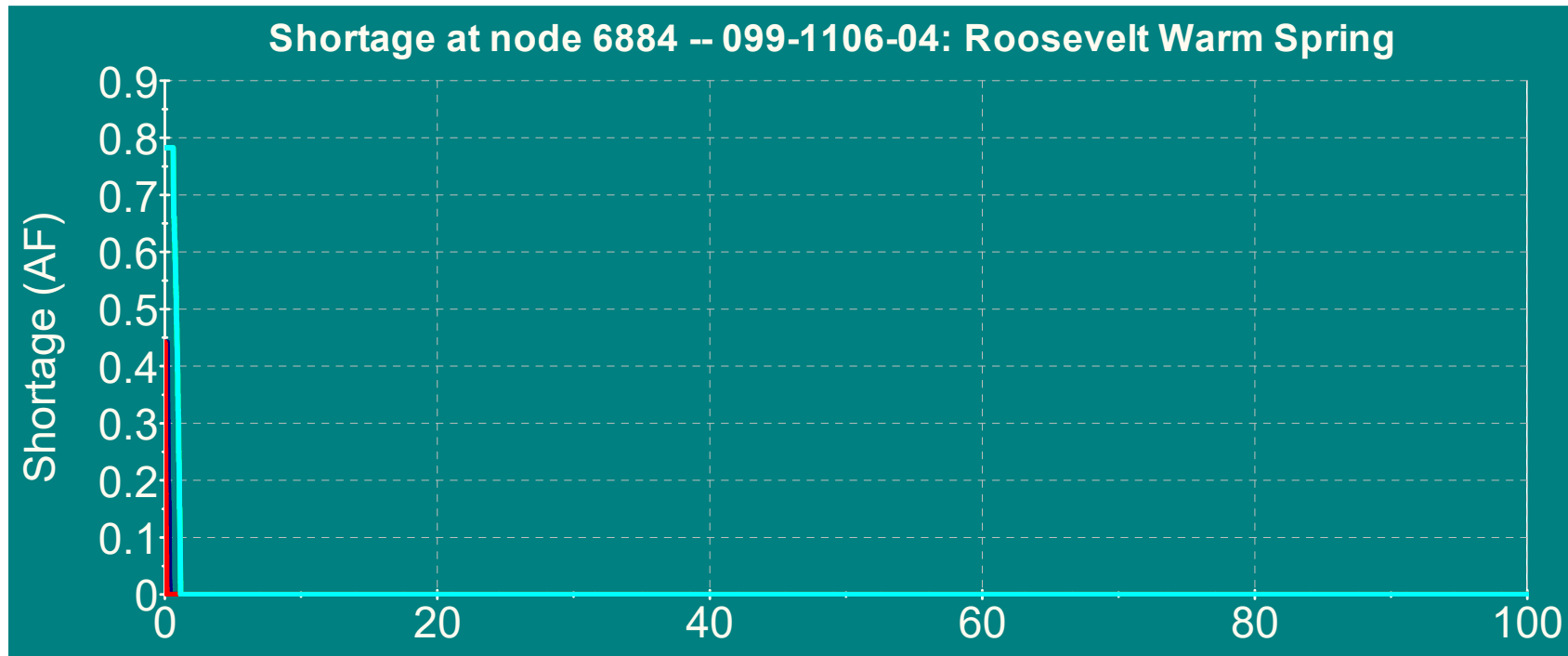
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Water Supply Challenge in 2011



- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Water Supply Shortage Frequency in 1939-2018



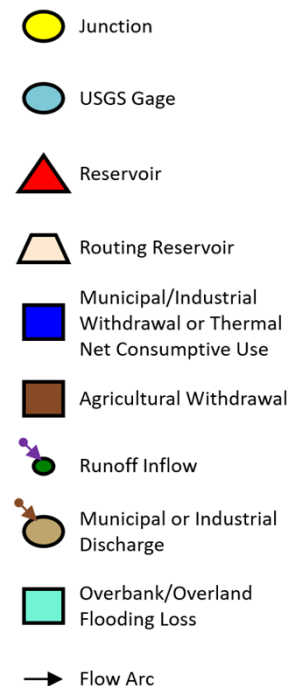
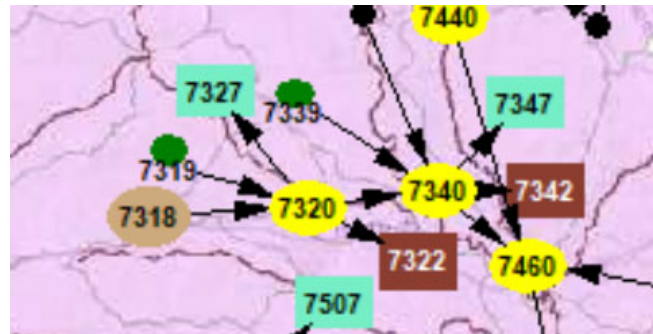
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
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- **Forecast (ag growth):** 2060 demands with ag projected growth

Wastewater Assimilation Challenge

- Wastewater increases with population growth, which may also bring challenge to water resource management.
- Effluent limitation is determined by two factors:
 - Available technology – technology based effluent limitations
 - Water quality standards – upholding water quality standards in the receiving water body - 7Q10 flow is usually used as low flow threshold for determining wastewater assimilation and NPDES permit limitations

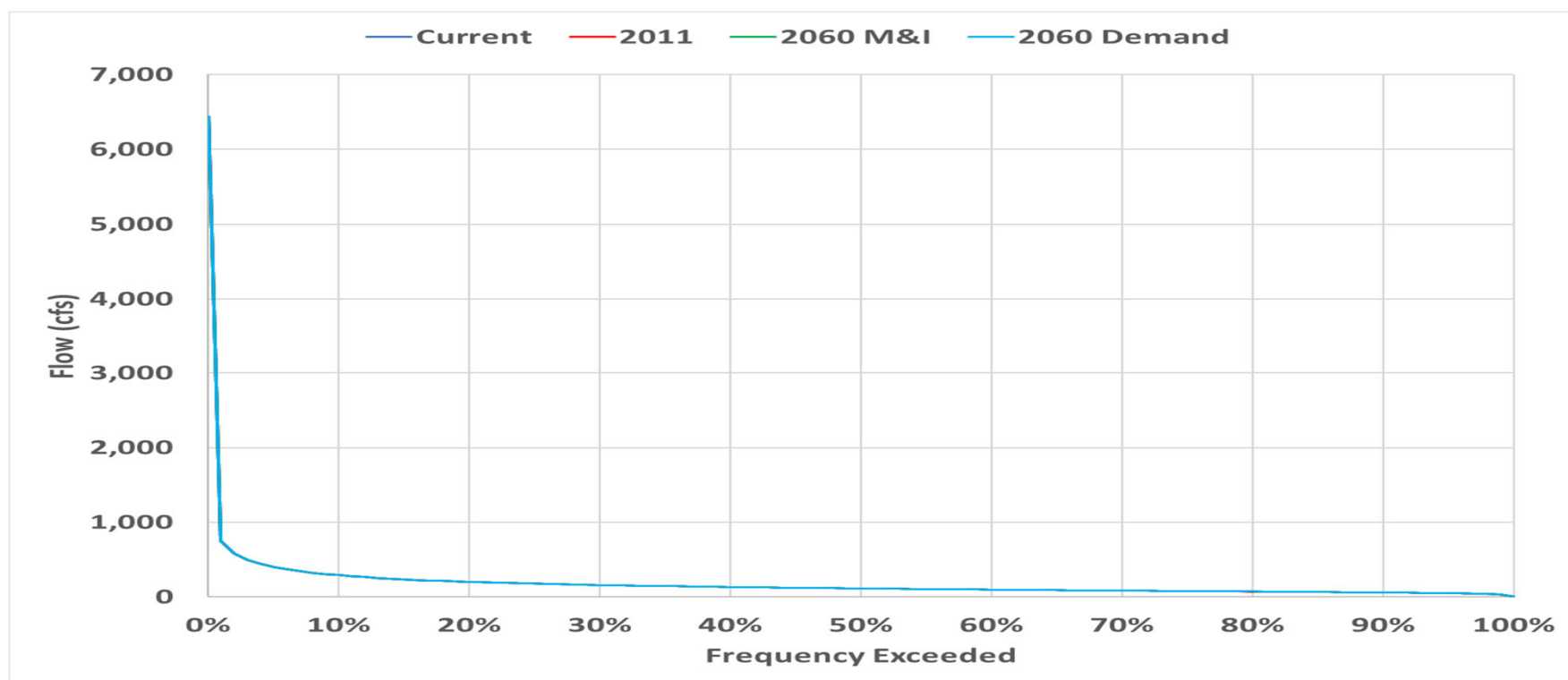
Wastewater Assimilation Challenge Example

- Permit holder: City of Reynolds (Reynolds WPCP)
- Permit GA 0020729, BEAM Node 7318
- Permitted monthly discharge flow: 0.4 mgd
- 7Q10 Flow at discharge location: 33.39 cfs



Simulation Results at Reynolds (GA 0020729)

Location Flow Frequency

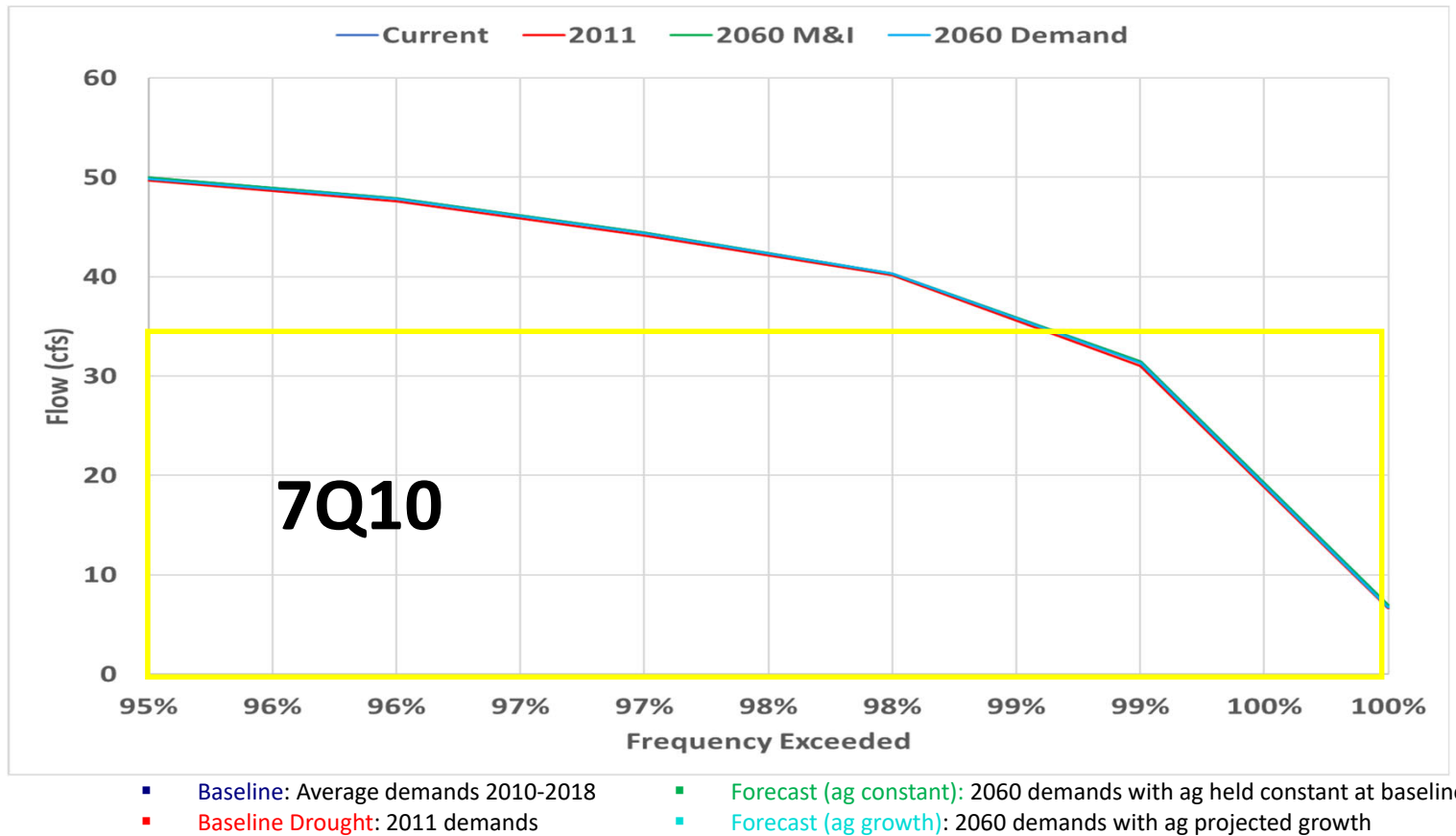


- Baseline: Average demands 2010-2018
- Baseline Drought: 2011 demands

- Forecast (ag constant): 2060 demands with ag held constant at baseline
- Forecast (ag growth): 2060 demands with ag projected growth

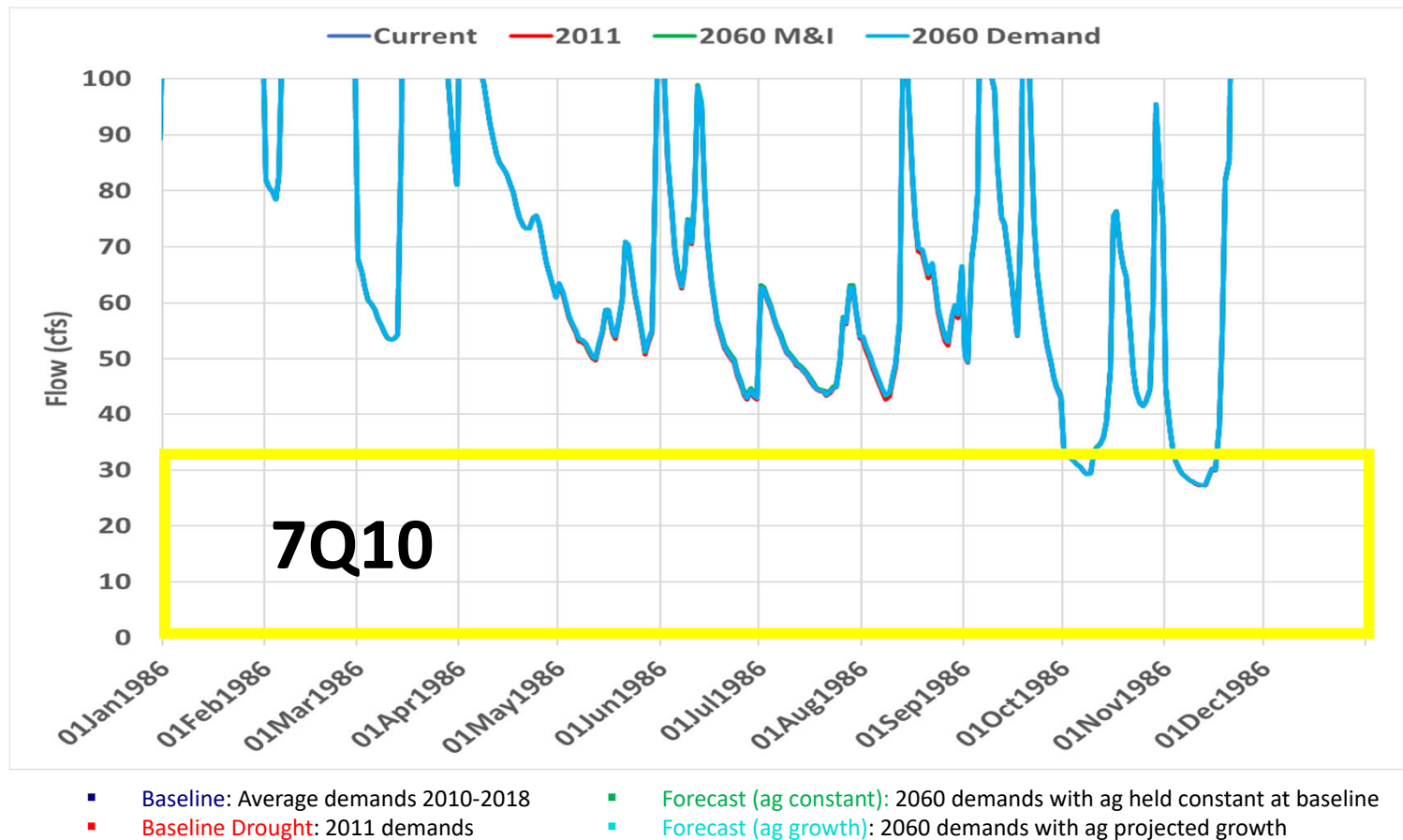
Simulation Results at Reynolds (GA 002072) Location

Flow Frequency (low end) 7Q10 = 33.39 cfs

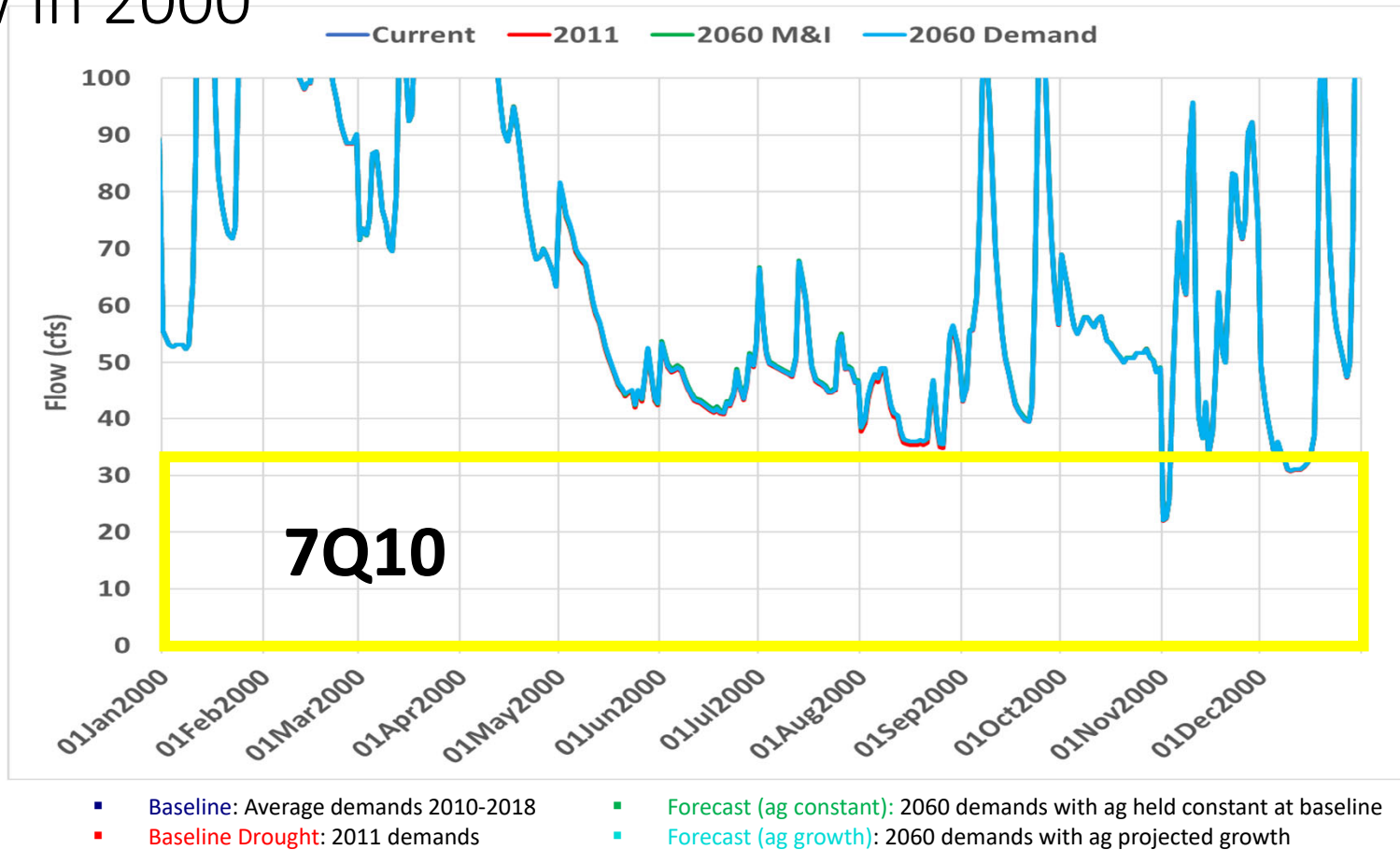


Simulation Results at Reynolds (GA 002072)

Location Flow in 1986

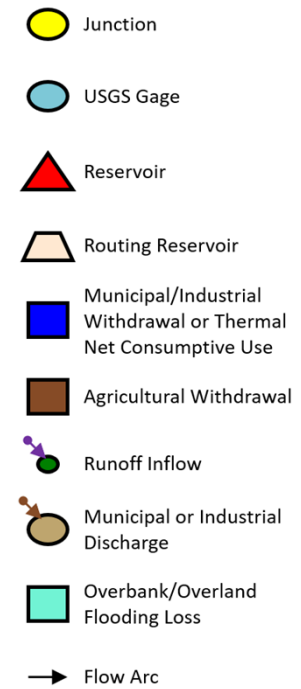
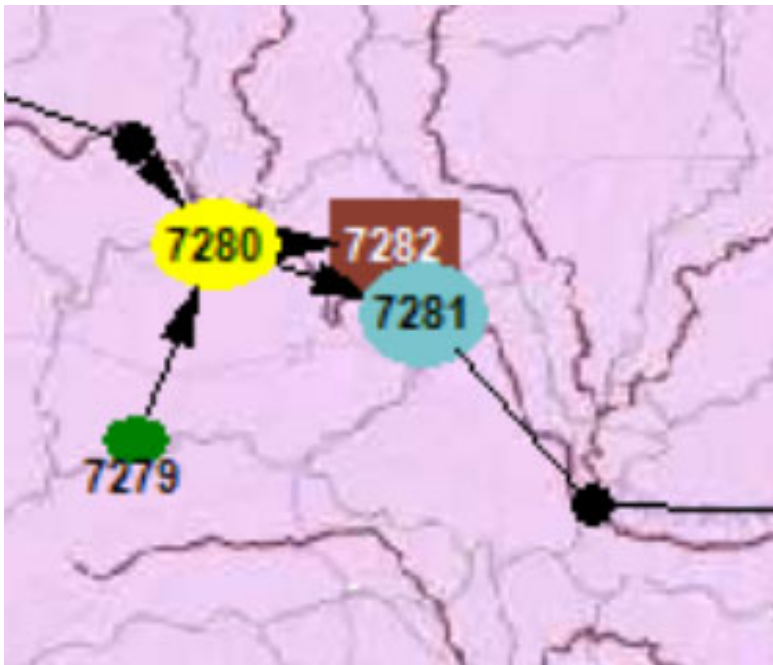


Simulation Results at Reynolds (GA 0020729) Location Flow in 2000

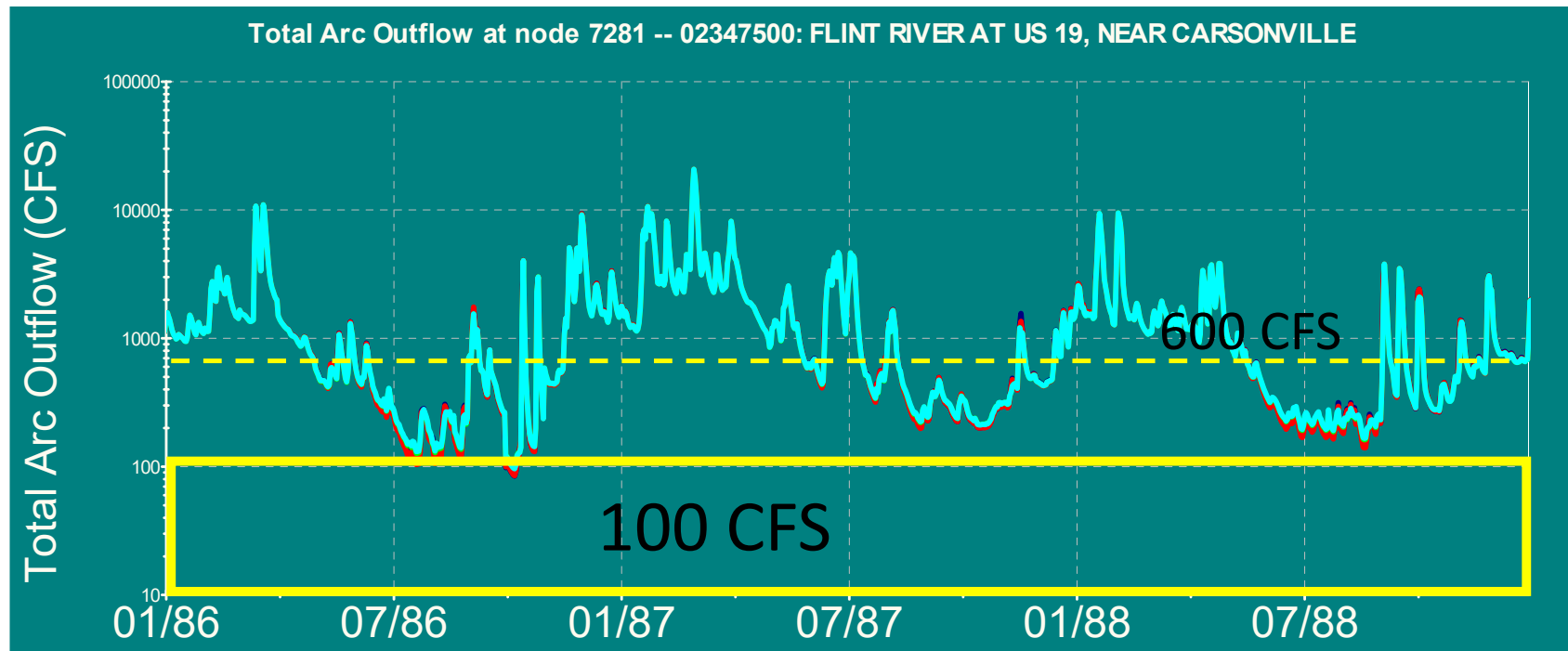


Carsonville Flow Condition

BEAM Node 7281

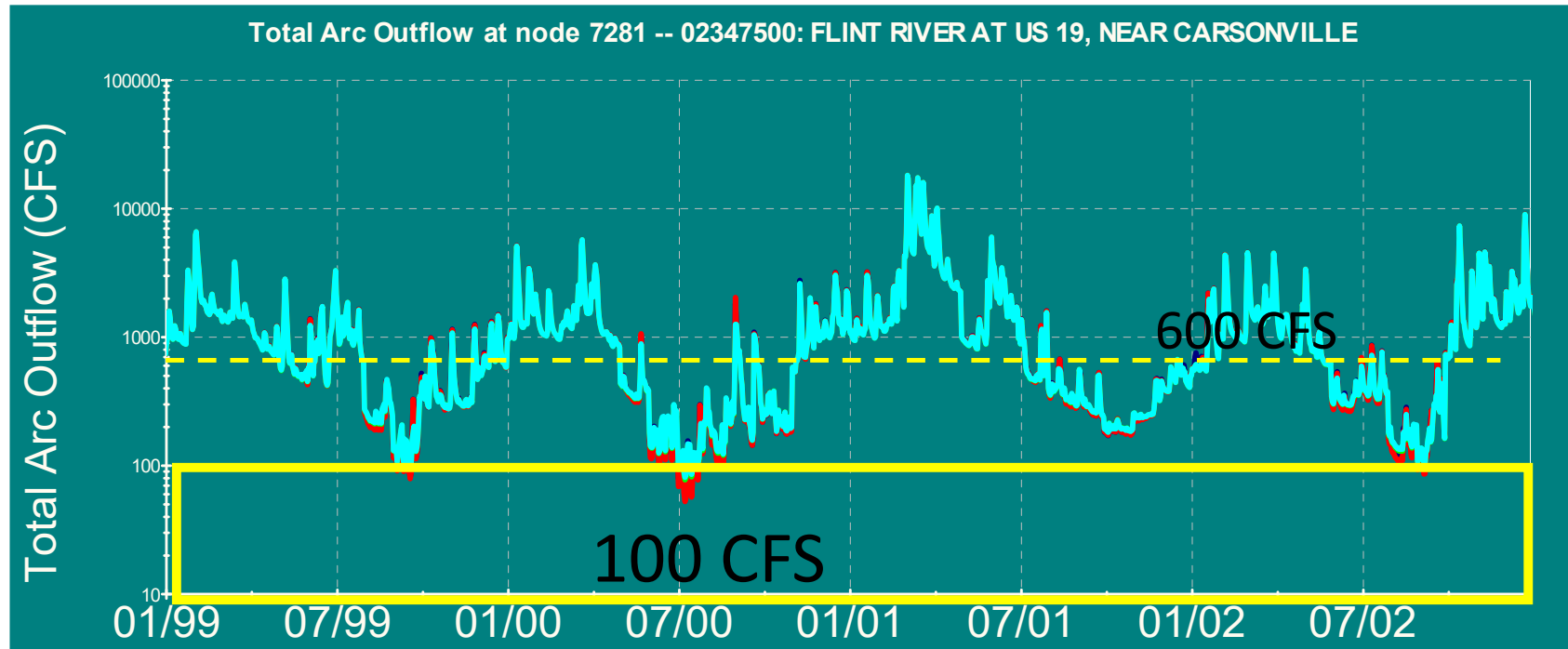


Simulation Results at Carsonville USGS 02347500 Location Flow in 1986-1988



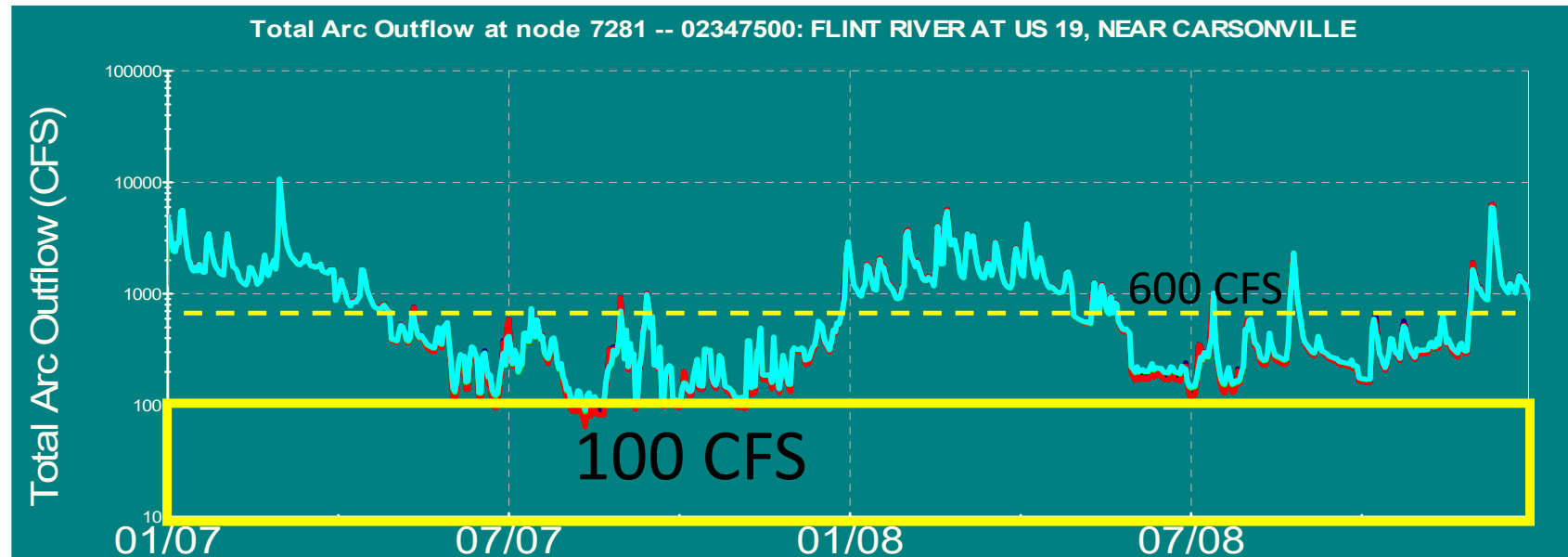
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Simulation Results at Carsonville (USGS 02347500) Location Flow in 1999-2002



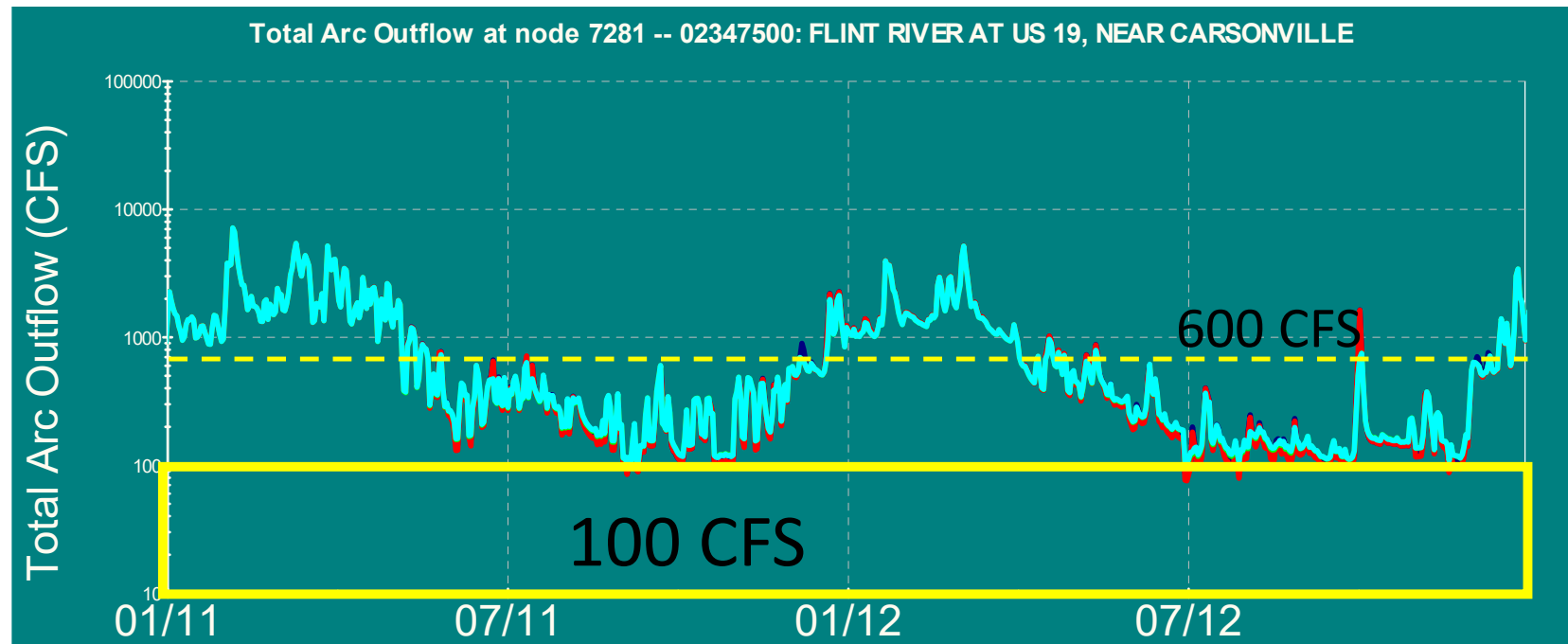
- **Baseline:** Average demands 2010-2018
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- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow in 2007-2008



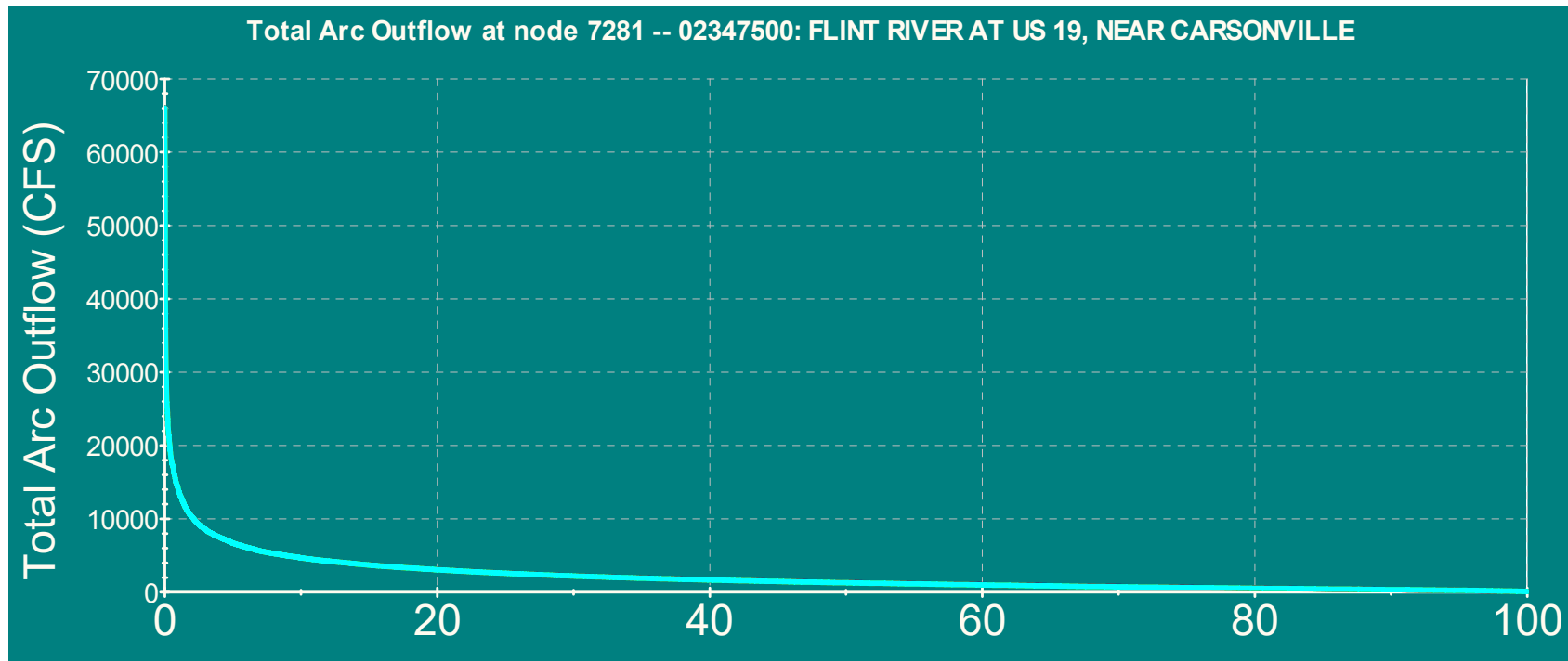
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow in 2011-2012



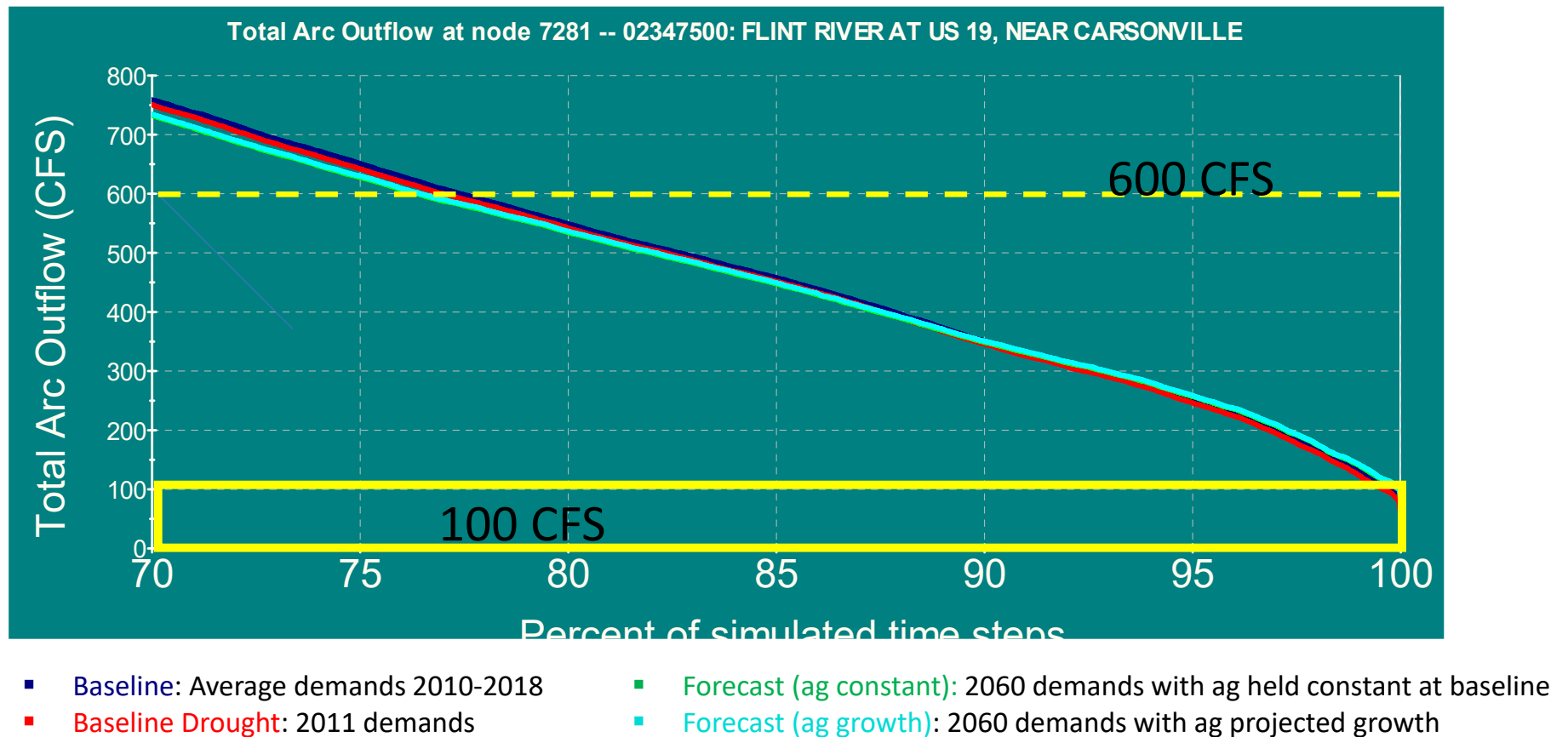
- Baseline: Average demands 2010-2018
- Baseline Drought: 2011 demands
- Forecast (ag constant): 2060 demands with ag held constant at baseline
- Forecast (ag growth): 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02341500) Location Flow Frequency

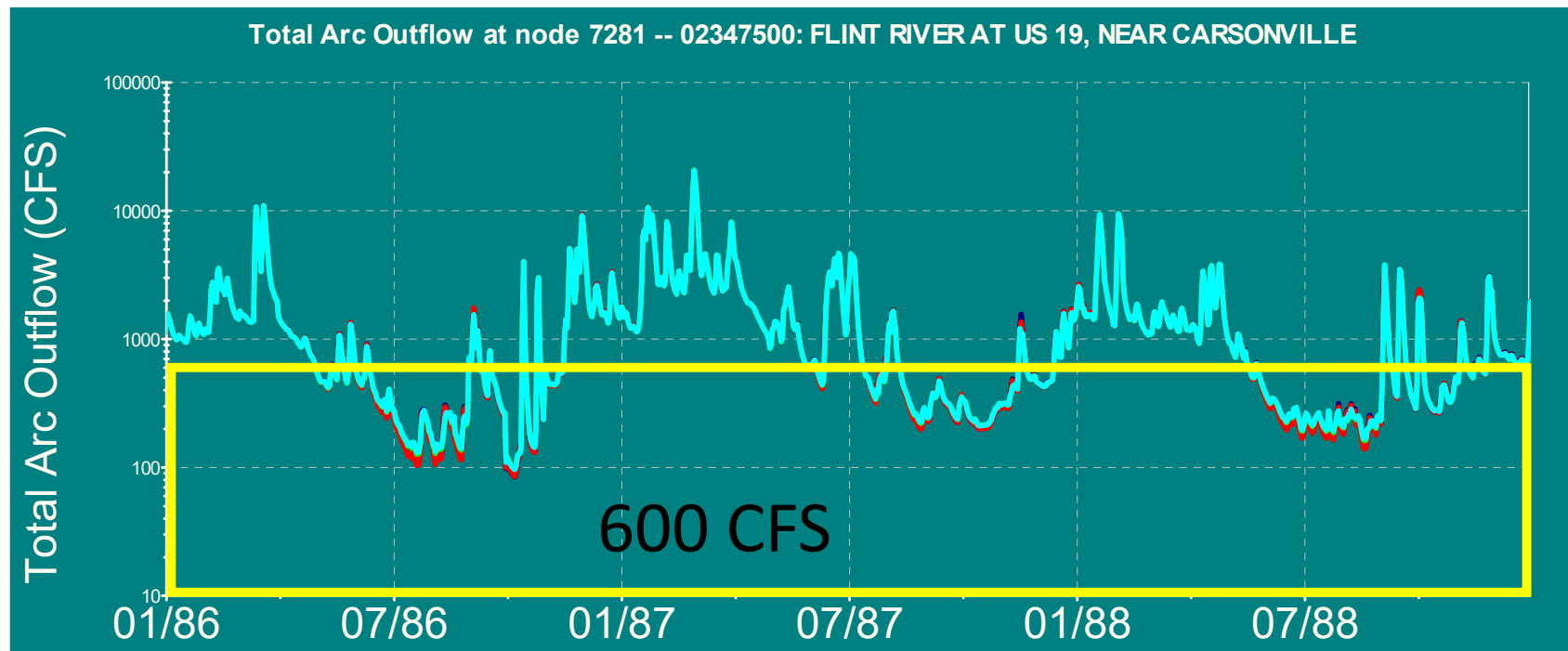


- Baseline: Average demands 2010-2018
- Baseline Drought: 2011 demands
- Forecast (ag constant): 2060 demands with ag held constant at baseline
- Forecast (ag growth): 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02341500) Location Flow Frequency (low end)

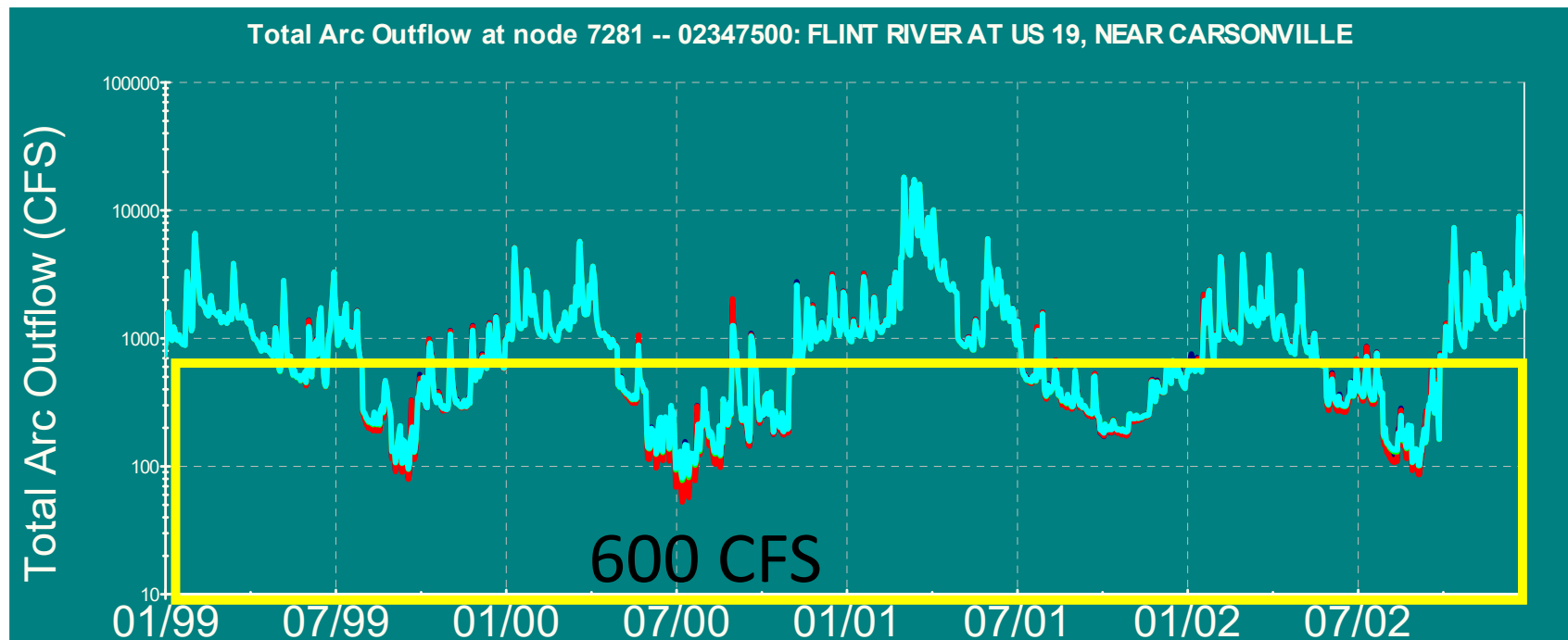


Simulation Results at Carsonville (USGS 02347500) Location Flow in 1986-1988



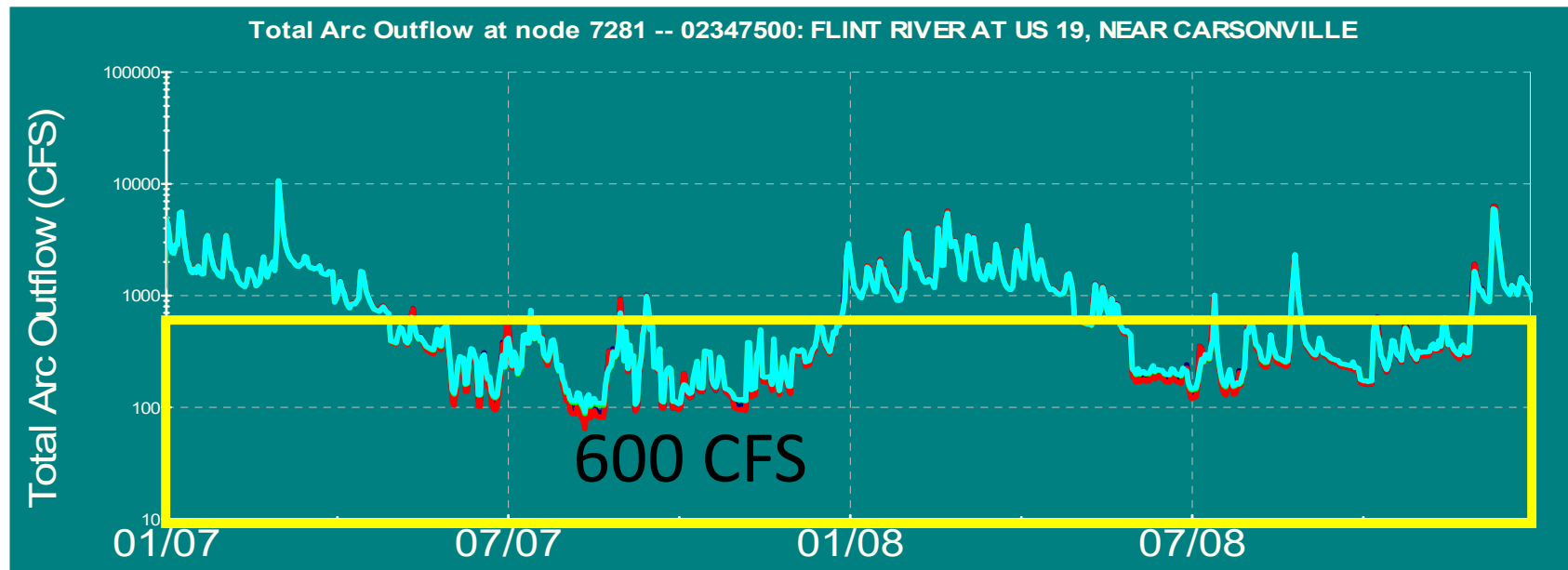
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow in 1999-2002



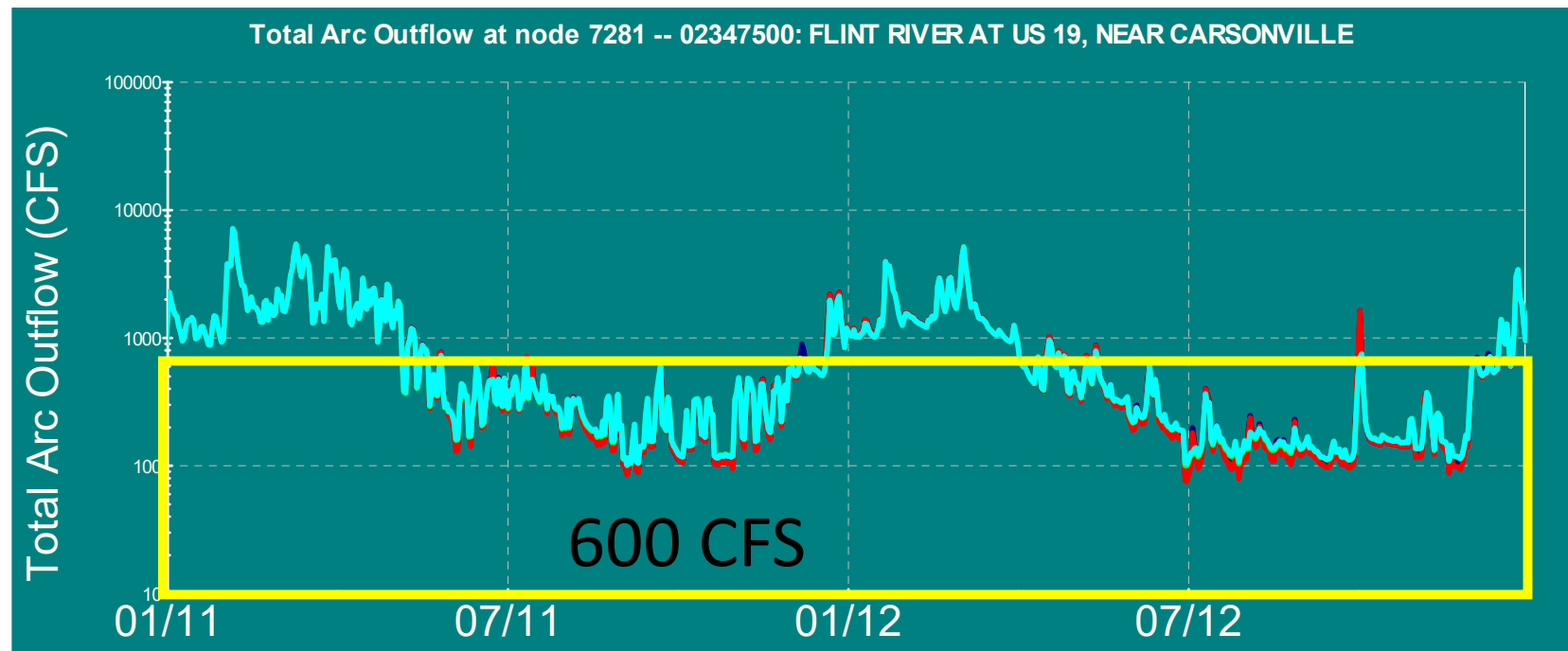
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow in 2007-2008



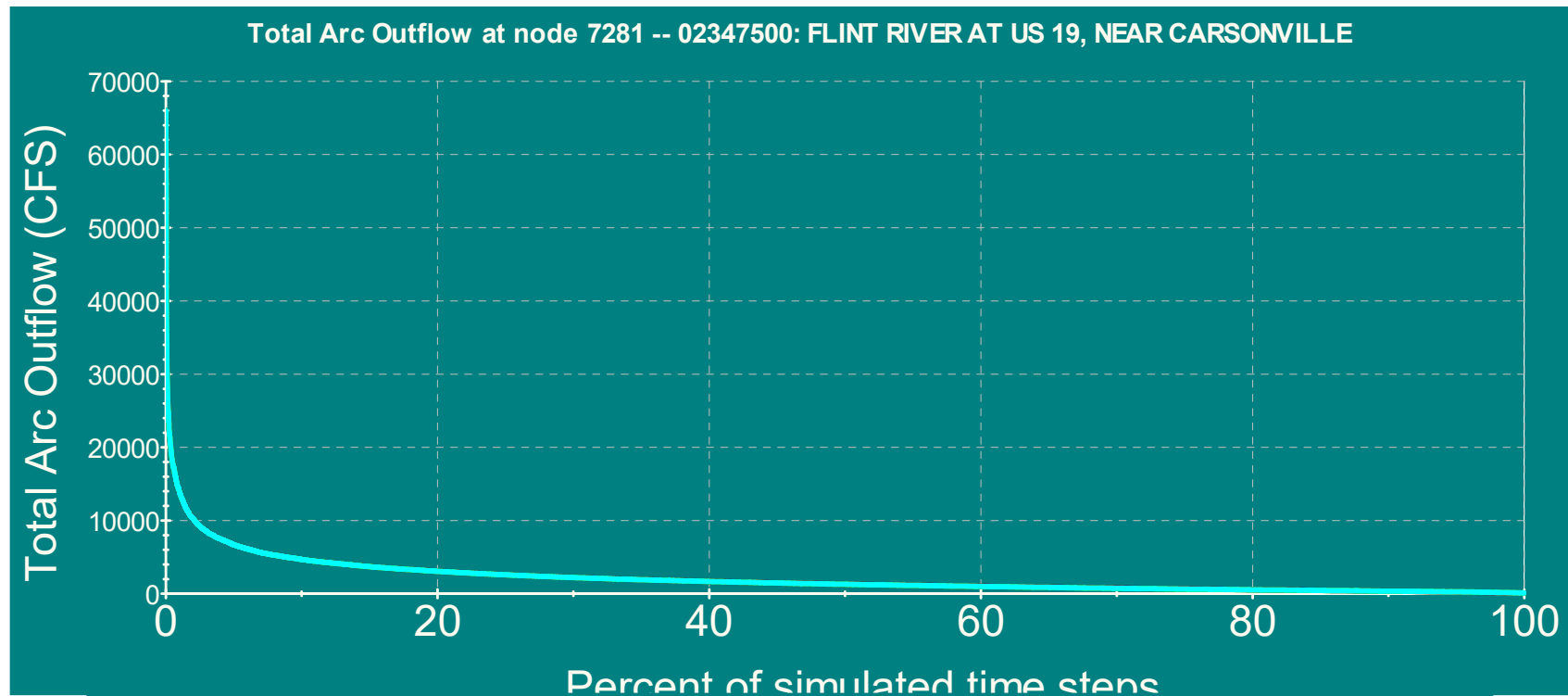
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow in 2011-2012



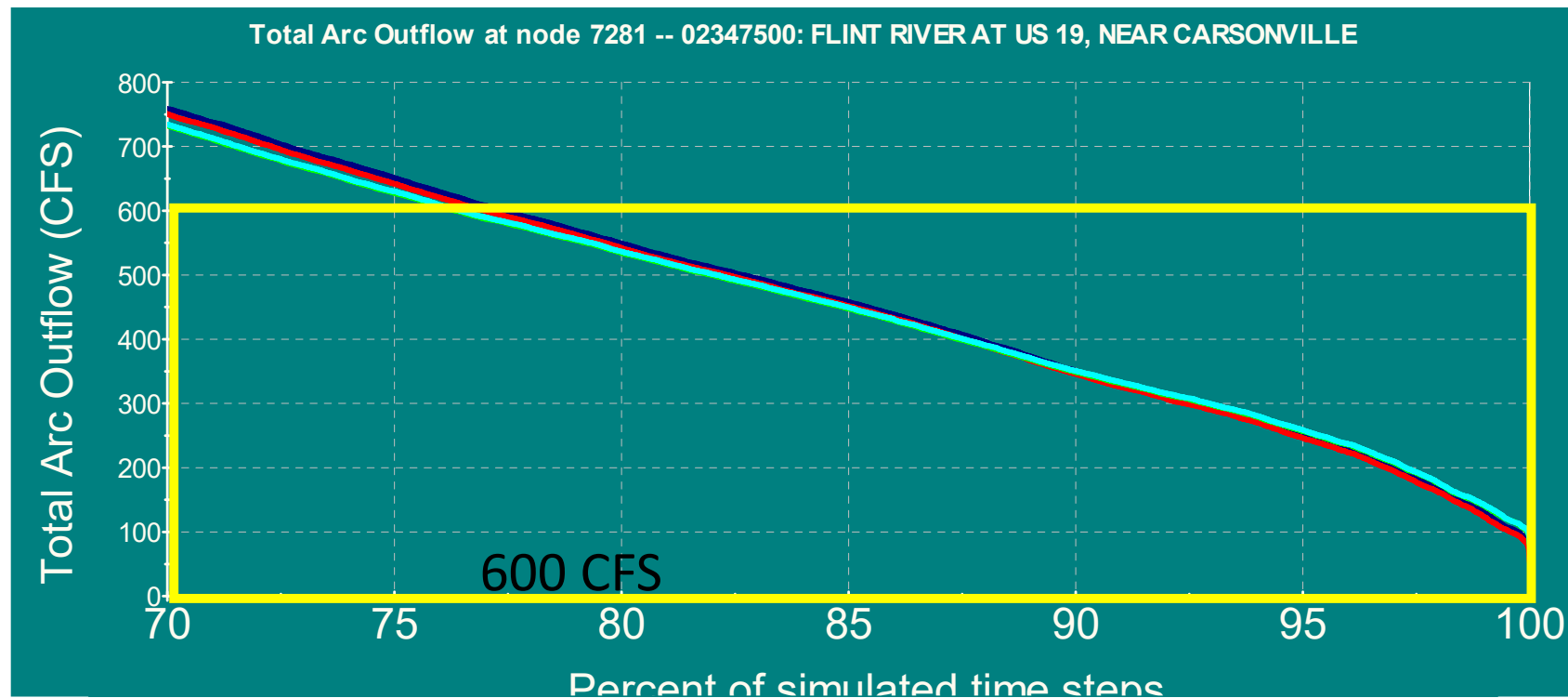
- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow Frequency



- **Baseline:** Average demands 2010-2018
- **Baseline Drought:** 2011 demands
- **Forecast (ag constant):** 2060 demands with ag held constant at baseline
- **Forecast (ag growth):** 2060 demands with ag projected growth

Simulation Results at Carsonville (USGS 02347500) Location Flow Frequency



- Baseline: Average demands 2010-2018
- Baseline Drought: 2011 demands

- Forecast (ag constant): 2060 demands with ag held constant at baseline
- Forecast (ag growth): 2060 demands with ag projected growth

Carsonville (USGS 02347500)

Simulated Flow Frequency

	Baseline	Baseline Drought	Forecast (ag constant)	Forecast (ag growth)
Minimum	63	53	77	81
10 percentile	350	346	349	351
25 percentile	651	642	627	630
Median	1,300	1,293	1,284	1,286
75 percentile	2,584	2,581	2,576	2,578
90 percentile	4,687	4,686	4,677	4,678
Maximum	65,999	65,994	65,991	65,995

Summary

- Moderate water supply challenges under baseline and future water use conditions
- Moderate wastewater assimilation challenges under baseline and future water use conditions
- Reviewed flow results at Carsonville under baseline and future water use conditions
- Additional evaluation can be added according to stakeholders' inputs
- Council suggestions for other metrics?

Questions?

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470-898-3891 (Cell)

Wei.Zeng@dnr.ga.gov

Small Group Discussion

Small Groups



Small group discussions

- What are your primary takeaways from the water availability assessment?
 - What implications do they have for you?
- Are there any new issues not yet reflected in the recommendations?
 - Do the results mesh with the revised plan recommendations?
- What else do you want to know about water availability?
 - Are there other metrics that you would like to see?
- If you had sufficient funds, what water-related projects would you prioritize over the next 5 years?
- Discuss any unsettled committee items



Water Quantity Committee Report on revised recommendations

Raines Jordan



Water Quantity Committee

Members: Adam Graft, Gordon Rogers, Teel Warbington, Jack Holbrook, Donald Chase, Raines Jordan, Michael Bowens, Rodney Hilley

Two meetings since last Council meeting:

- June 14, 2022: Discussed draft edits/updates made to the Management Practices in Section 6
- July 25, 2022: Finished discussions on draft edits/updates to the Management Practices and started Recommendations to the State



Key Changes to Water Quantity Related Management Practices

Management Practice	Key Change
DM1	Modifications to update and add further explanation about suggestions for agricultural water metering.
DM4	Added advanced irrigation scheduling to management practice for new permits. More details later in this report.
DM5	Updated description to address current incentive programs for voluntary agricultural water conservation.
SF1	Modified description to address a full range of reservoir options and cost evaluation. Added a sentence about long-term nature of this management practice. Further discussion planned for this afternoon for coordinated review of reservoir related recommendations in the plan.
SF2 & SF3	Updates to describe new ARPA project (alternative groundwater sources for agriculture during drought, aquifer monitoring, habitat conservation planning).
SF4	Added recommendation for requirement that new surface water withdrawal permits for farm ponds be conditioned such that the withdrawals do not contribute to low flows. More details later in this report.



Key Changes to Water Quantity Related Management Practices

DM4: *Implement agricultural water conservation practices in the Upper Flint Water Planning Region*

Added the following text in the description:

“Under the Flint River Drought Protection Act, new withdrawal permits in the Flint River Basin should be required to implement advanced irrigation scheduling (e.g., soil moisture sensors, irrigation scheduling applications). Demonstrating compliance should not be burdensome and could rely on existing self-certification methods for existing efficiency requirements.”

Any comments from Council?



Key Changes to Water Quantity Related Management Practices

SF4: *Continue to evaluate farm ponds in the Upper Flint Water Planning Region*

Added the following to the description (based on Suwannee Satilla plan):

“Future surface water withdrawal permits for farm ponds should be conditioned such that the withdrawals do not contribute to the frequency or severity of low flow conditions in their local drainage areas.”

Any comments from Council?



Key Changes to Recommendations to the State

Recommendation	Key Change
IN-4	Updated to reflect availability of more information to the Council about recharge areas and aquifers.
IN-5	Added estimation of volume for small withdrawals to recommendation.
IN-7	Consolidated information need recommendations about small/medium impoundments and farm ponds in this recommendation.
IN-8	New recommendation about conservation relative to water storage. See next slide for details.
IN-9	Shortened to reflect improvements in agricultural water meter programs and to cross-reference DM1.
IN-10	Updated to reflect current focus for conservation assessment. Moved materials about small/medium impoundments to IN-7.
IN-12	New recommendation about Griffin water supply arrangement with Coweta County. See next slide for details.



Key Changes to Recommendations to the State

Added new Information Need

IN-8: Conduct a dynamic analysis (under varied management, development, and climatic conditions in the region) to assess how conservation can optimize use of reservoir storage. Consider the results of this analysis when implementing Management Practice SF1 regarding the evaluation of water storage options in the Upper Flint Basin.

Any comments from Council?



Key Changes to Recommendations to the State

Added new Information Need:

IN-12: Evaluate the cost to buy out the City of Griffin's water supply contract with Coweta County to improve understanding of the cost-benefit, in terms of dollars and flow impacts, of eliminating the ongoing inter-basin transfer in that supply arrangement. Evaluations should include contextual, seasonal flow improvement in terms of drought flows at affected Upper Flint River Basin gauges, and cost-per-cfs calculations relative to other planned and completed flow-improvement projects throughout the Flint River Basin (Upper and Lower). The Council is not recommending removing the supply pipeline. It should remain in place and be periodically maintained to help assure flexibility and resilience among the connected water providers.

Any comments from Council?



Summary of Water Quantity Committee Report

Reviewed most of the parts of Section 6 that are relevant to Water Quantity

- Some items for full Council discussion (later this afternoon)
- Additional tweaks may be needed based on BEAM results and Council deliberations

Next steps:

- Finish review of Water Quantity related Recommendations to the State in Section 6
- Reviewing revisions to Resource Assessment reporting in the plan (Sections 3 and 5)



Water Quality Committee Report on Revised Recommendations

Beth English



Water Quality Committee

Members: Barry Blount, Beth English, Brant Keller, Lamar Perlis, Butch Turner, Joel Wood

- Meeting on June 22, 2022
 - Discussed draft edits/updates made to the Management Practices in Section 6
- Meeting on August 11, 2022
 - Discussed draft edits/updates made to the Recommendations to the State in Section 6



Key Changes to Water Quality Related Management Practices

Management Practice	Key Change
WQ2: <i>Improve implementation of nonpoint source controls</i>	Added language on implementation of BMPS Added language from WQ3 on encouraging implementation of stream buffers for all land uses and includes language on incentivizations and increased Section 319 grant funds.
WQ3: <i>Increase education directed toward improving water quality</i>	Added language for encouraging education concerning groundwater quality
WQ5: <i>Utilize technology to improve water quality management information</i>	Revised and updated to include language on the utilization of resources that have been made available for collection, coordination and utilization of water quality data.



Key Changes to Water Quality Related Recommendations

- Recommendations to the State:
 - **WP-7: Recommends legislation of authority to the regional planning councils**
 - Quality subcommittee discussed that having “Authority” would require staff and money and commitment.
 - *Input needed from Council*
 - **WP-8: Development of tristate framework**
 - Similarly to WP-7, the Quality subcommittee discussed that a tristate authority would require resources, time, money, staff, and other states buy-in.
 - *Input needed from Council*



Inter-Council Coordination Committee Report on Revised Joint Recommendations

Donald Chase



Inter-Council Coordination Committee

Lower Flint - Ochlockonee

- Hugh Dollar
- Jay Smith
- Jimmy Webb

Middle Chattahoochee

- Patrick Bowie
- Harry Lange

Upper Flint

- Donald Chase



Inter-Council Coordination Committee Report

Meeting on June 23, 2022

1. Reviewed and Discussed 2017 “Coordinated Recommendations with Neighboring Councils” in Section 6
2. Made Updates and Revisions
3. Select representative to present at August council meeting



Inter-Council Coordination Committee

JT-1 Unedited

- Recognize the critical need for better use of existing storage and for more storage in the Apalachicola-Chattahoochee-Flint (ACF) System and recommend that a plan for additional storage be developed and implemented and that it consider the following: better utilization of existing storage in the Chattahoochee River Basin, new storage in the Flint River Basin, and enhancement of existing storage capacity.

JT-2 Edited

- Urge EPD and those involved in the resource assessment modeling to continue to improve upon existing models for future regional water planning by further expanding use of actual and current data on water use and conditions and by continuing to refine assumptions that more closely approximate actual conditions.



Inter-Council Coordination Committee

JT-3 Unedited

- Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF. Consider the recommendation of the ACF Stakeholders in its Sustainable Water Management Plan regarding an ACF transboundary water management institution as this organization is developed.

JT-4 New

- Recognize the need for identifying contributors that diminish water quality. Continue to develop methods, guidelines, and BMPs to improve water quality, and continue to educate on these BMPs.



Council Discussion



Council Discussion

- Report from Break-Out Groups
- Issues for Council Input/Discussion:
 - Recommendation about council role/authority
 - Recommendations about interstate coordination/planning/conflict management
 - Recommendations about water storage
- Other topics from the Council?



Recommendation WP-7 Addressing the Role/Authority of the Council

WP-7: The Council recommends that the Georgia General Assembly legislate authority to the regional water planning councils, including the Upper Flint Water Planning Council, to manage, plan and provide oversight of water resources within each region around the State. Funding should be provided to the councils from State appropriations. Funding should be used to provide for coordination and implementation of regional and state water plans and for studies, assessments and future plan updates within the respective water planning regions.



Recommendations WP-8 and JT-3 Addressing Interstate Coordination in ACF

WP-8: The Council urges the State to seek a timely resolution of current interstate water issues that directly affect the Apalachicola-Chattahoochee-Flint Basin. The Council recommends the development of a tristate framework designed to address interstate water issues in the future and the inclusion of the regional water planning councils within this framework. The Council requests that it be supported in making any updates to this Regional Water Plan as needed to address changes in ACF Basin management as a result of the settlement, resolution, or decision in on-going inter-state litigation or similar events that have the potential to substantially change how the Basin is managed.

JT-3: Consider the creation of a new coordinated, interstate planning organization for the ACF System. Membership in this organization to represent Georgia shall include, but not be limited to, members of the regional water planning councils with water planning regions that include parts of the ACF. Consider the recommendation of the ACF Stakeholders in its Sustainable Water Management Plan regarding an ACF transboundary water management institution as this organization is developed.



Items in Plan Addressing Water Storage

Mgmt Practice/ Recommendation	Key Change
SF1	Evaluate storage options in the Upper Flint River Basin that can provide for supply and flow augmentation in dry periods (<i>see plan for more details</i>)
SF4	Continue to evaluate farm ponds in the Upper Flint Water Planning Region (<i>see plan for more details</i>)
IN-7	Evaluate the full water cycle impacts of irrigation and the impacts of small and medium impoundments on stream flows through intercepted drainage, evaporative loss, and water quality. GAEPD has advanced the understanding of how farm ponds are used in Georgia and how to incorporate them into the surface water availability resource assessment. However, better understanding of farm pond operation and impacts is needed to support more thorough evaluation. In particular, a better understanding of the impact of evaporative loss is needed.
IN-8	Conduct a dynamic analysis (under varied management, development, and climatic conditions in the region) to assess how conservation can optimize use of reservoir storage. Consider the results of this analysis when implementing Management Practice SF1 regarding the evaluation of water storage options in the Upper Flint Basin.
JT-1	Recognize the critical need for better use of existing storage and for more storage in the Apalachicola-Chattahoochee-Flint System and recommend that a plan for additional storage be developed and implemented and that it consider the following: better utilization of existing storage in the Chattahoochee River Basin, new storage in the Flint River Basin, and enhancement of existing storage capacity.



Public Comment



Next Steps

Meagan Szydzik



Next Steps

- Next Meeting: December 2nd – Plan Review of Sections 3 & 5
- Committees to work on plan revisions
 - Water Quantity and Water Quality



Thank You

Upper Flint

