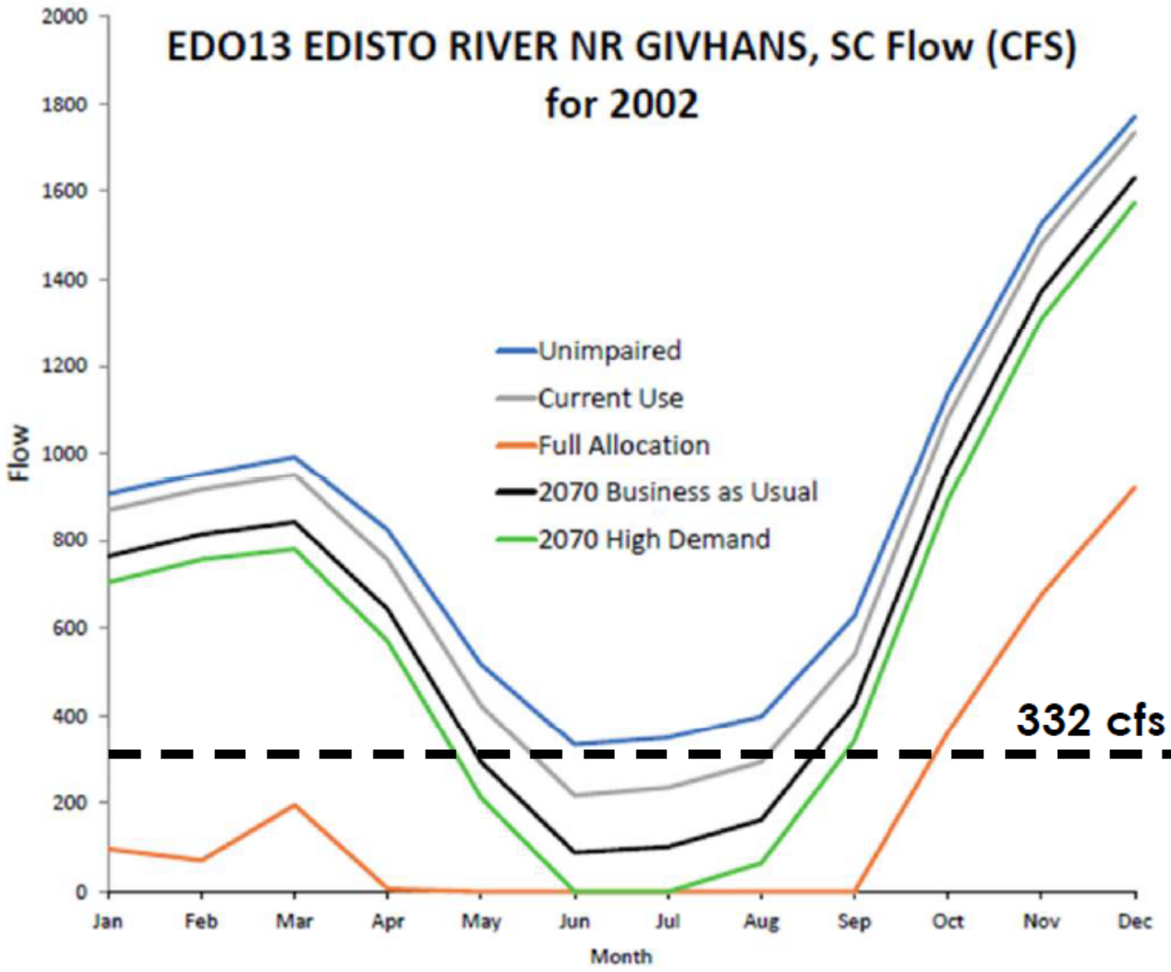
Discuss Low Flow Surface Water Management Strategy

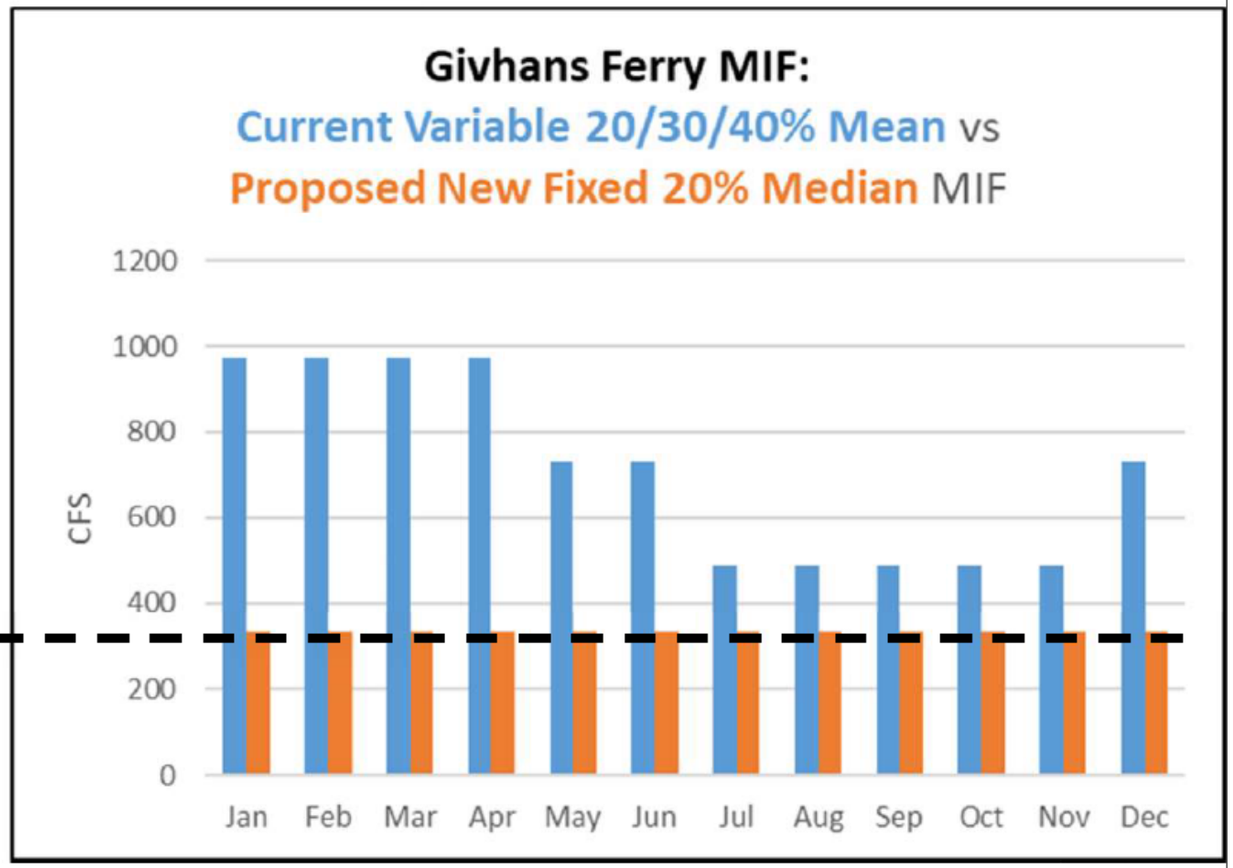
Proposed Low Flow Management Strategy

20% Increments Percent Below MIF	River Flow Range (cfs) Lower	Upper	Basin-wide % Reduction in SW Withdrawals
0 - 20%	266	332	20%
20 - 40%	199	266	40%
40 - 60%	133	199	60%
60 - 80%	66	133	80%
80 - 100%	0	66	100%

Proposed Surface Condition of 332 cfs at Givhans Ferry

20% median at Givhans Ferry represents a value between the unimpaired and current use monthly minimum (i.e., point at which management strategies involving withdrawals could minimize further drops in river flow during a drought)





Data for possible thresholds of exclusion:

	Permits or Registrations 60 MGM or more	Actual Avg. Mo. Demand 60 MGM or more	Peak Monthly 60 MGM or more
Total Withdrawals (MGM) =	2446	2446	2446
Sum Covered (MGM) =	2,364	2,239	2,239
Withdrawal Covered =	97%	92%	92%
Withdrawers Exluded =	61%	86%	86%

- **60 MGM peak monthly** strikes a balance between protecting flow and protecting the smaller withdrawers:
  - Strategy still covers 92% of the total volume of withdrawals
  - Excludes 86% of the withdrawers who have smaller volumes of withdrawal
- 60 MGM is 20x the minimum 3 MGM covered by the law

Implementation Notes

- We need to be careful not to be too prescriptive about how withdrawers accomplish the reduction
- We don’t want to penalize withdrawers who may already be withdrawing much less than they typically do or could at the time the low flow strategy is triggered
- In other words, if a withdrawer is already pulling less than typical, they shouldn’t be held to that amount minus 20% when the surface condition is reached or else the low flow strategy would incentivize withdrawers to pump more as the surface condition approaches (opposite of goal)
- This is especially important for withdrawers who withdrawal more during Spring/Summer. In April, they may only be pulling 30% of their peak withdrawal. If the first 20% reduction trigger is triggered in April, the withdrawer shouldn’t be asked to remain at 30% or less of their typical withdrawals going into the following months. That would be asking them implement a 70% withdrawal reduction despite only being in the first 20% reduction trigger window.
- If streamflows are still in the 20% reduction trigger range, the recommendation would be that the withdrawers limit withdrawals to typical withdrawal minus 20% (i.e., 80% of withdrawal)

CWS Contingency Plan

CWS's plan is written such that when the river reaches said trigger (or surface condition in the case of the low flow strategy), a reduction of ##% off peak demand should occur such that Edisto withdrawals will not exceed ##.

CWS % Shift off Edisto			CWS Not to Exceed	
Flow Trigger	**Permitted**	**Peak Demand**	**cfs**	**MGD**
312	72%	20%	124	80
260	79%	40%	93	60
174	86%	60%	62	40
87	91%	75%	39	25

**CWS shifts demand to Bushy Park Res. or Goose Creek Res. sources.*

Other Notes

- We also need to keep in mind our low flow strategy surface condition doesn't set a new (lower) limits for any new permits in the basin. New permits would still be held to the MIF prescribed within the regulation.

- There may also be some withdrawers with unique considerations such as those that need to shift all withdrawal from surface to ground or vice versa based on triggers prescribed by SCDHEC. In such cases, the timing of their shift will be dictated by SCDHEC, not our low flow strategy.

Motion

The RBC adopt the proposed low flow management strategy which would trigger whenever the total basin discharge (measured at Givhans) drops below a surface condition of 20% median (currently about 332 cfs) with the goal of reducing withdrawals equal to the exceedance of the surface condition in the following increments. The low flow strategy excludes withdrawers whose peak monthly withdrawals are less than 60 MGM (20x the regulated threshold of 3 MGM). *[additional language was added regarding implementation over several years based on available funding, as noted in the meeting minutes]*

20% Increments Percent Below MIF	River Flow Range (cfs) Lower	Upper	Basin-wide % Reduction in SW Withdrawals
0 - 20%	266	332	20%
20 - 40%	199	266	40%
40 - 60%	133	199	60%
60 - 80%	66	133	80%
80 - 100%	0	66	100%