

## CRWPP Hydrologic Performance Measures

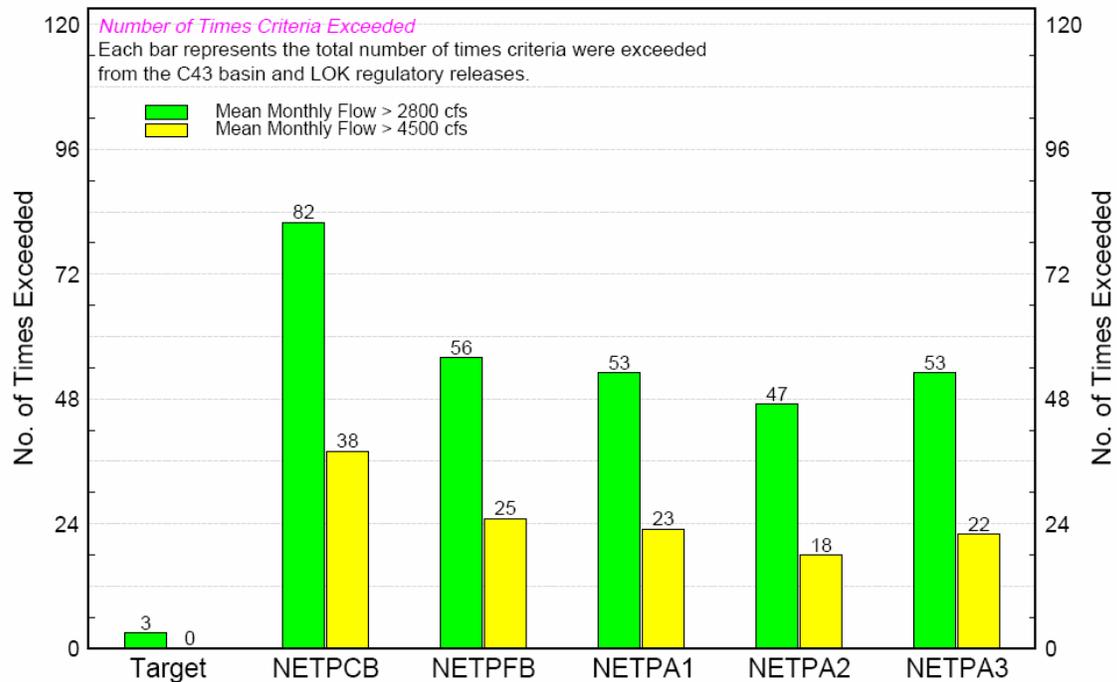
**Performance Measure:** Number of Times Caloosahatchee Estuary High Discharge Criteria Exceeded – Mean Monthly Flows >2,800 cfs and Mean Monthly Flows > 4,500 cfs

**Description** – The Lake Okeechobee WSE Regulation Schedule is applied to regulate (flood control) discharges to the Caloosahatchee River, and subsequently to the Caloosahatchee Estuary, when lake stages are high. The Caloosahatchee River has primary capacity for local inflows and is only utilized for CRE discharges when there is secondary capacity available. The number of times that the Caloosahatchee Estuary high discharge criterion is exceeded must be limited to prevent destructive impacts on the estuary.

**Target** – No more than 3 events with mean monthly flows at S-79 greater than 2,800 cfs and no events with mean monthly flows greater than 4,500 cfs.

**Evaluation Method** - The Northern Everglades Regional Simulation Model (NERSM) will be employed for all evaluations. The evaluation will be based on the period of record from 1970 through 2005. The number of average monthly S-79 flows between 2,800 cfs and 4,500 cfs will be tallied for each alternative.

Number of Times Caloosahatchee Estuary High Discharge Criteria Exceeded  
(mean monthly flows > 2800 & 4500 cfs from 1970 - 2005)



For Planning Purposes Only  
Run date: 09/10/07 20:14:17  
Regional Simulation Model (RSM)  
Script used: estuary\_scr\_ID496  
Filename: caloos\_2800\_4500\_flow\_bar.out.agr

## CRWPP Hydrologic Performance Measures

**Performance Measure:** Number of Times Salinity Criteria Not Met for the Caloosahatchee Estuary – Mean Monthly Flows < 450 cfs and Mean Monthly Flows > 2,800 cfs

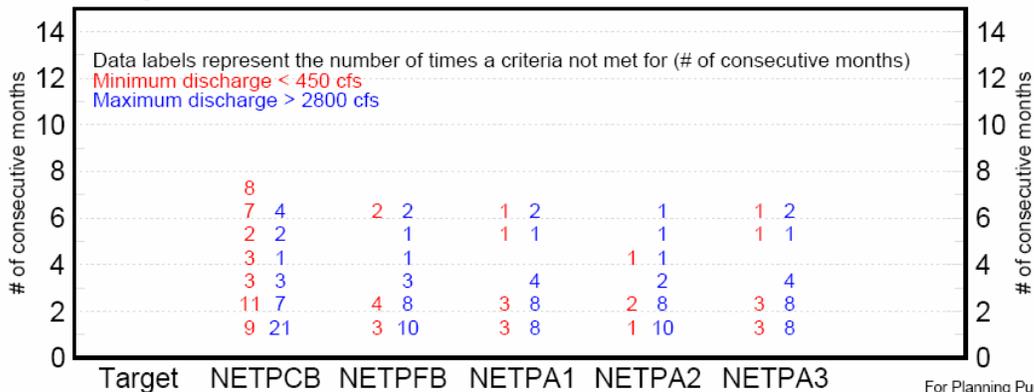
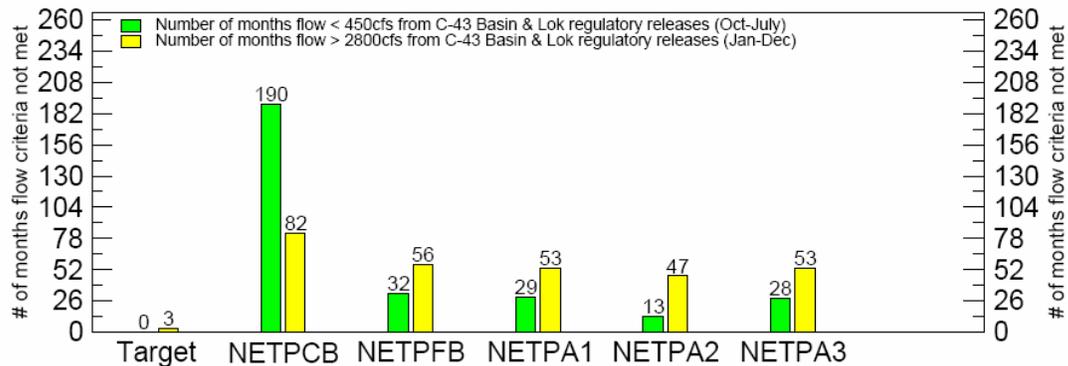
**Description** – A healthy, naturally-diverse and well-balanced estuarine ecosystem can exist only if the salinity regimes are controlled within the desirable range. Lake Okeechobee discharges have a significant impact on how well desirable salinity regimes are maintained in the Caloosahatchee Estuary.

**Target** – Maintain mean monthly flows at S-79 between 450 cfs and 2,800 cfs with no more than 3 events with mean monthly flows greater than 2,800 cfs.

**Evaluation Method** - The Northern Everglades Regional Simulation Model (NERSM) will be employed for all evaluations. The evaluation will be based on the period of record from 1970 through 2005.

The number of mean monthly flows outside of the desirable range from 450 cfs to 2,800 cfs will be tallied for each alternative.

### Number of Times Salinity Envelope Criteria NOT Met for the Caloosahatchee Estuary (mean monthly flows 1970 - 2005)



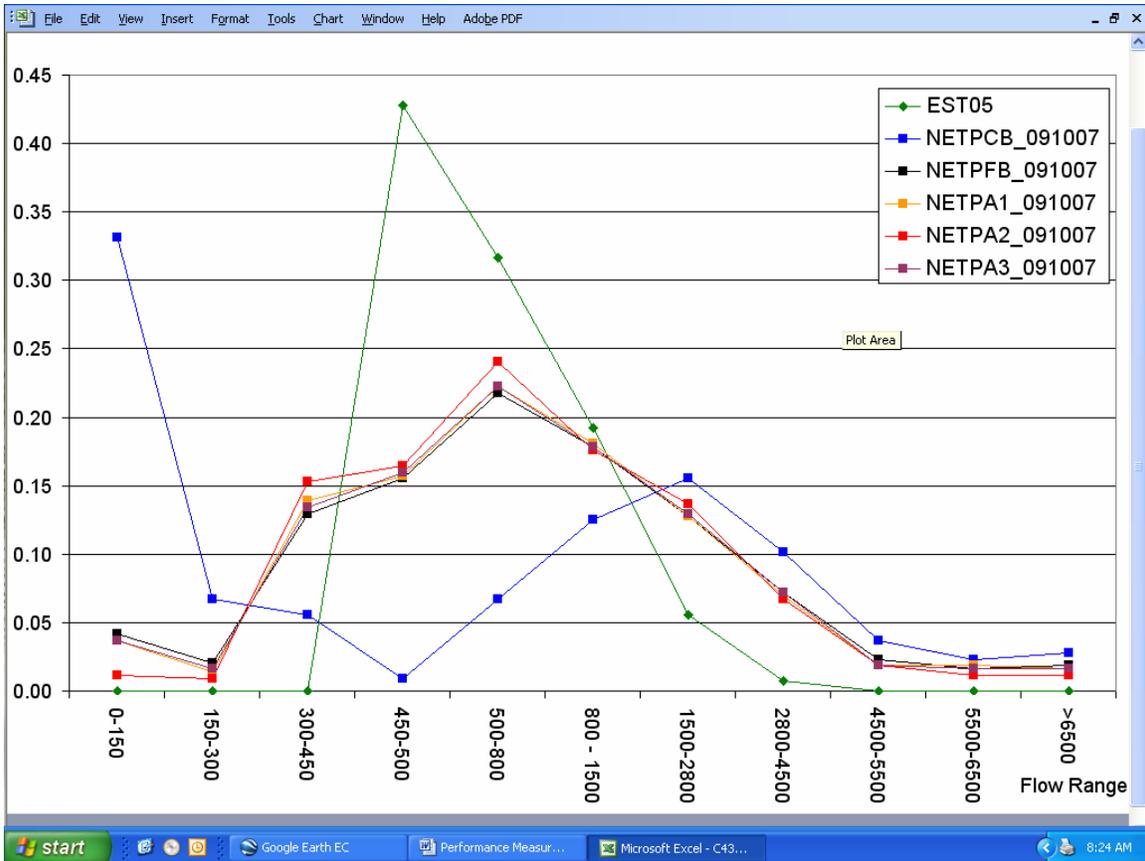
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# CRWPP Hydrologic Performance Measures

## Performance Measure: Total Flow Index

**Description** – Compares Alternative flow distribution to desired flow distribution

**Evaluation Method** – The Northern Everglades Regional Simulation Model (NERSM) will be employed for all evaluations. The evaluation will be based on the period of record from 1970 through 2005.



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