

Evaluation of EFR Templates for BBASC Consideration

PRELIMINARY – DRAFT

July 17, 2012

Brazos River Stream Gage - Recommendation for BBASC

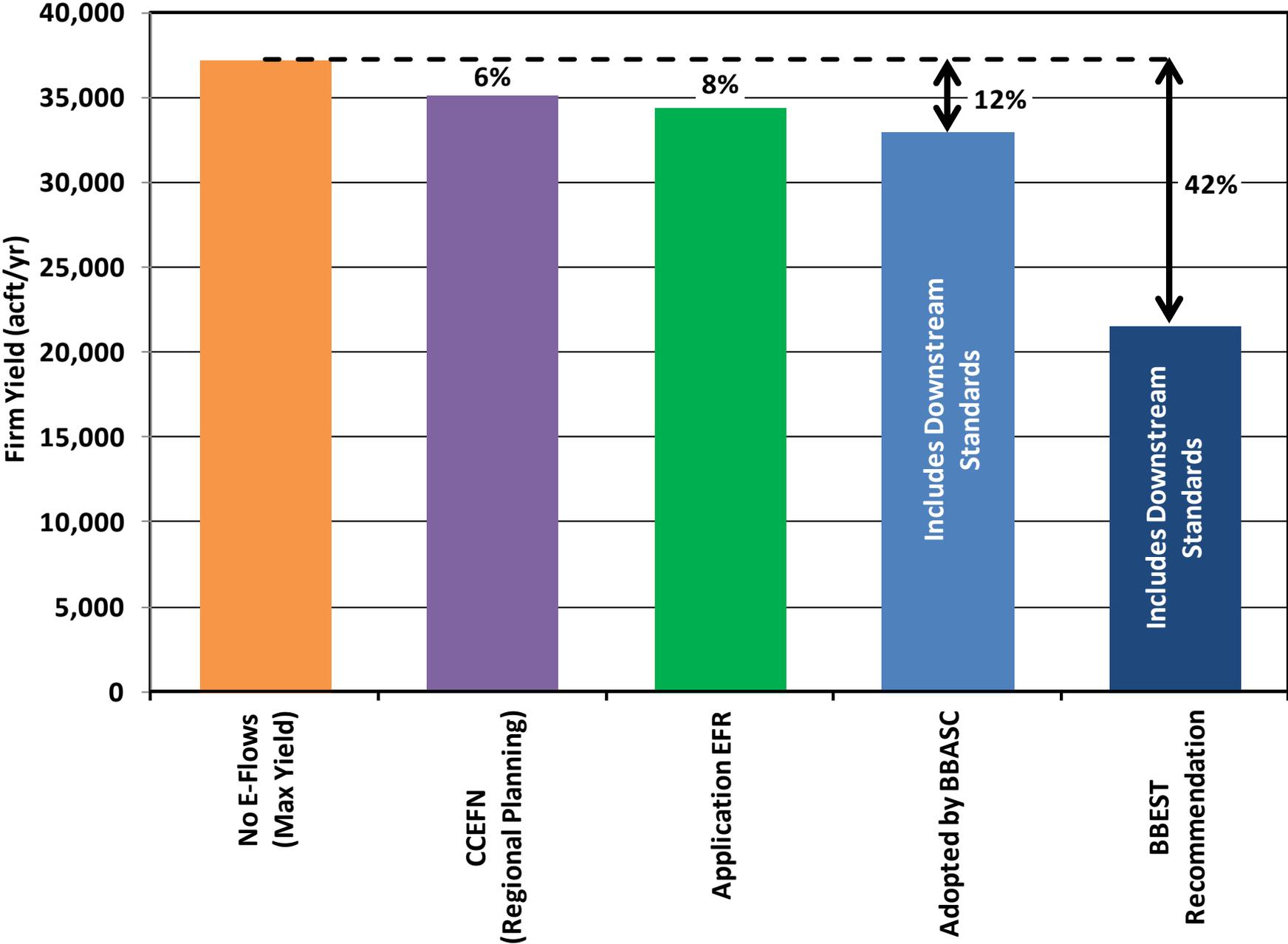
Next Tier - Once per Season
 Lowest Tier - Twice per Season
 Lowest Tier - Once per Season
 Same as BBEST

High Flow Pulses	Qp: HFP2 cfs with Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2	Qp: HFP2 Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2	Qp: HFP2 Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2									
	Qp: HFP1 cfs with Average Frequency 2 per season Regressed Volume is HFP1 Duration Bound is HFP1	Qp: HFP1 cfs with Average Frequency 2 per season Regressed Volume is HFP1 Duration Bound is HFP1	Qp: HFP1 cfs with Average Frequency 2 per season Regressed Volume is HFP1 Duration Bound is HFP1									
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Base Flows (cfs)	Wet Avg Dry	cfs	cfs	cfs								
Subsistence Flows (cfs)		cfs	cfs	cfs								
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
	Winter			Spring			Summer					

Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)

- Notes:
1. Period of Record used : .
 2. Volumes are in acre-feet and durations are in days.
 3. Episodic events are terminated when the volume or duration criteria are met, or when the flow drops below 6 cfs, or when the flow is below 29 cfs and the flow drops from one day to the next by less than 5%.
 4. 50% rule applied as defined by BBASC
 5. Wet, Average, Dry defined by hydrologic season.

Cedar Ridge Reservoir Firm Yield Summary



Variations on Recommendation to BBASC

- Template Structure
 - Wet – Average – Dry
 - HFP2 – HFP1 – HFP1
 - # of Events per Season

Brazos River Stream Gage - Recommendation for BBASC

	Winter			Spring			Summer					
	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
High Flow Pulses	HFP2			HFP1			HFP1					
	HFP1			HFP1			HFP1					
	HFP1			HFP1			HFP1					
Base Flows (cfs)	Wet			Avg			Dry					
	cfs			cfs			cfs			cfs		
	cfs			cfs			cfs			cfs		
Subsistence Flows (cfs)			cfs			cfs			cfs			

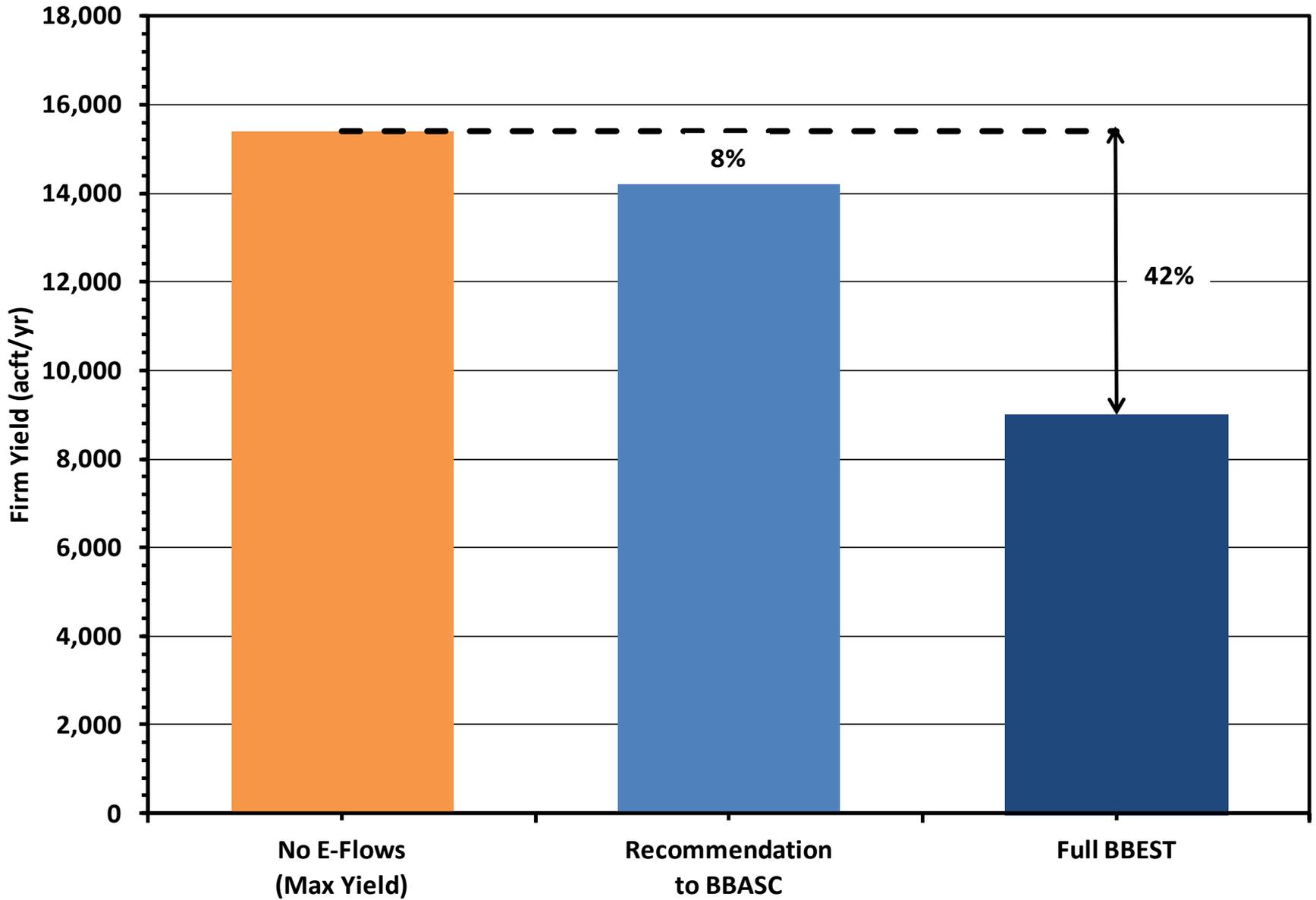
Flow Levels	High (75th %ile)
	Medium (50th %ile)
	Low (25th %ile)

Notes:

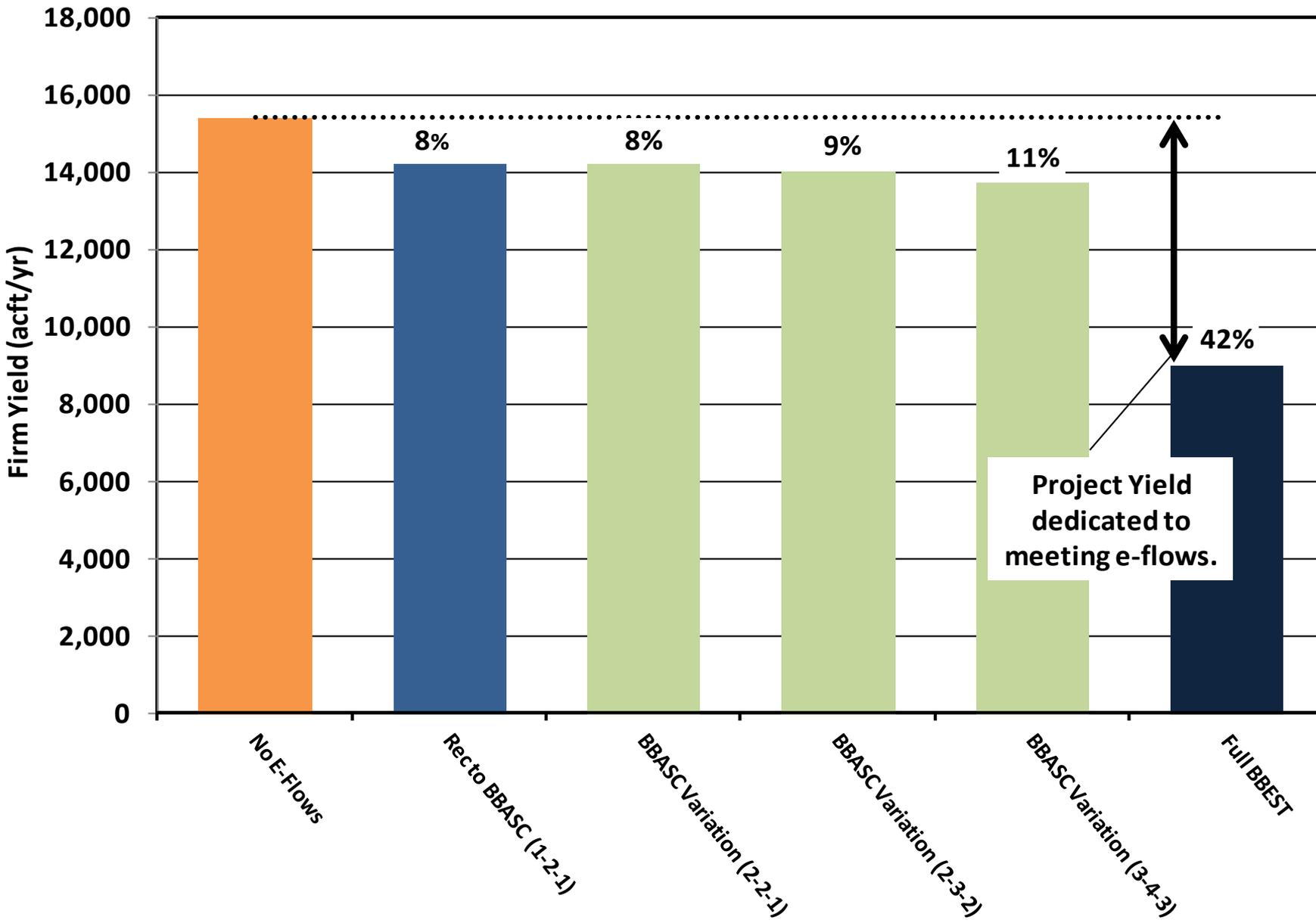
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- Scenarios with HFP3 and above exceeded 18% impact on yield of water supply projects.

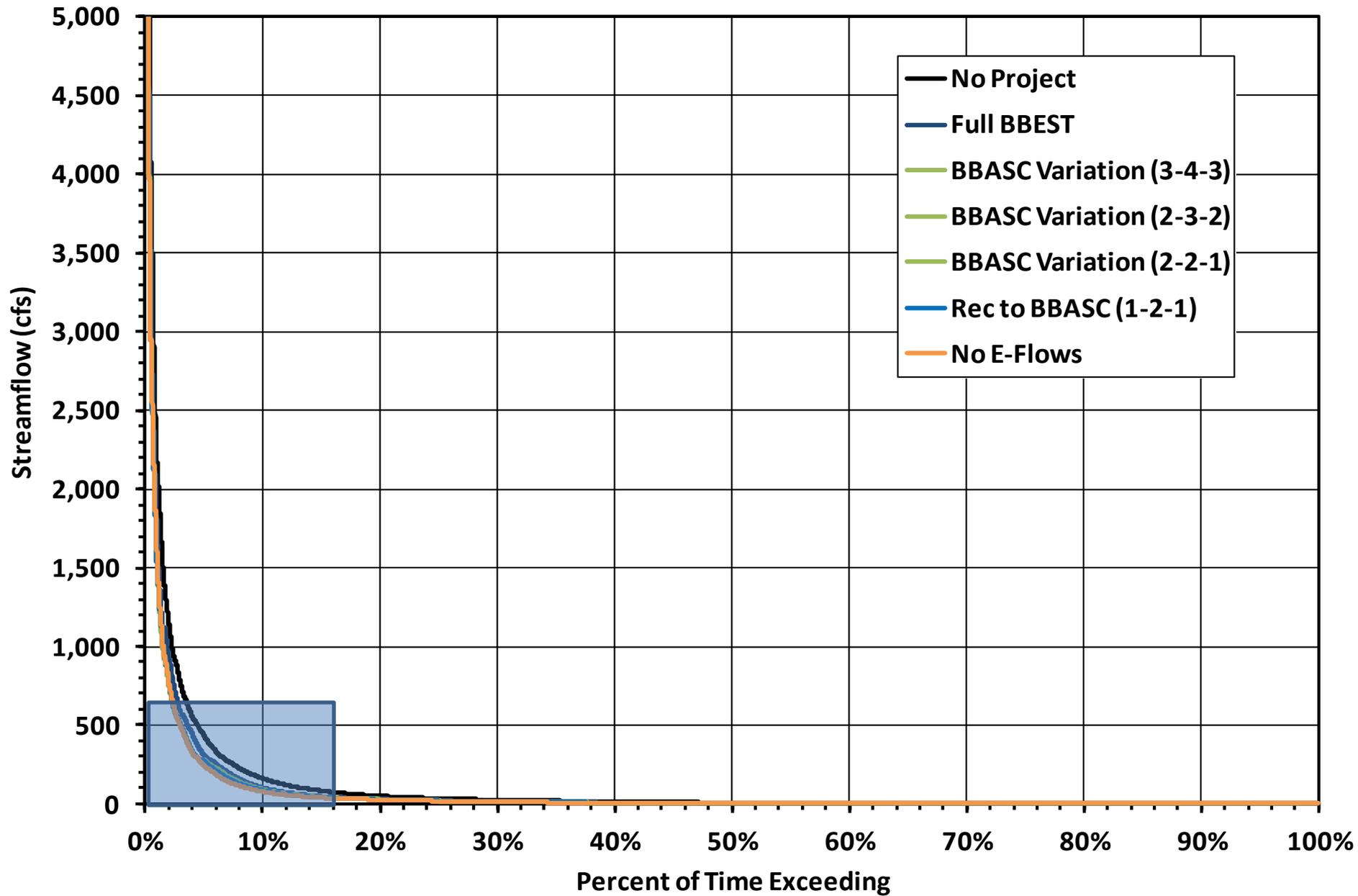
Yield Comparison for Double Mtn Fork West Reservoir



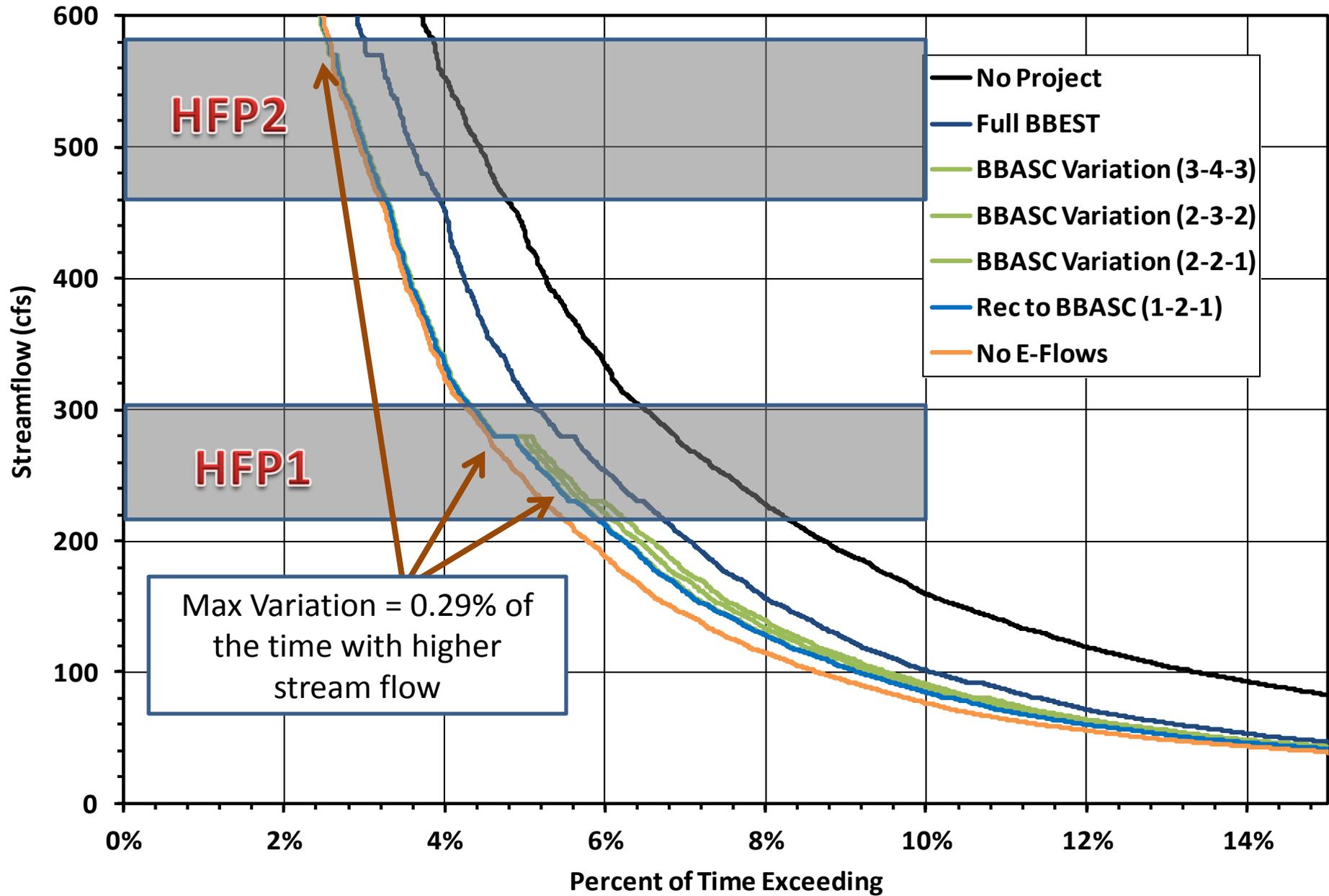
Double Mountain Fork West



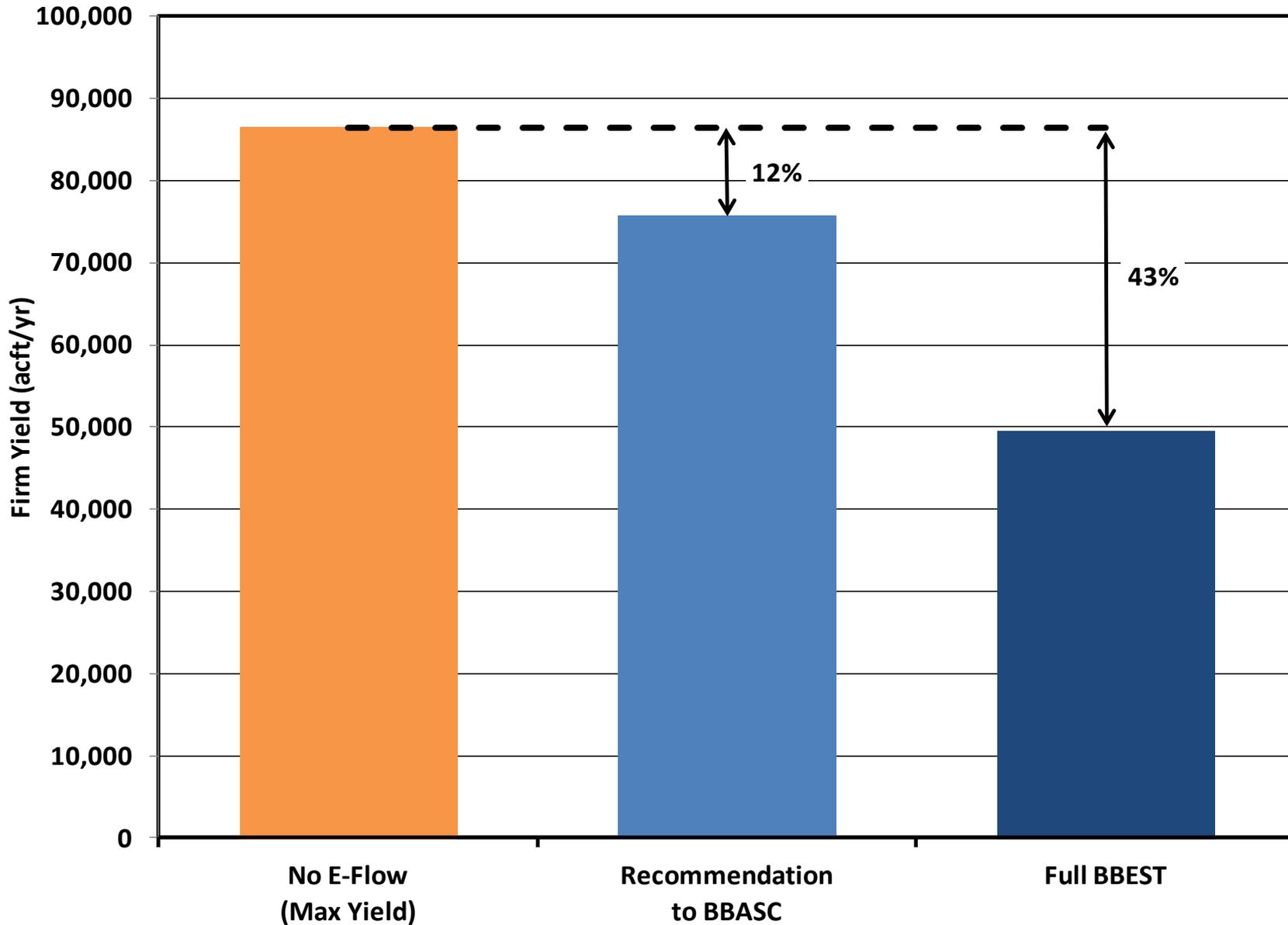
DMFW Resulting Streamflow



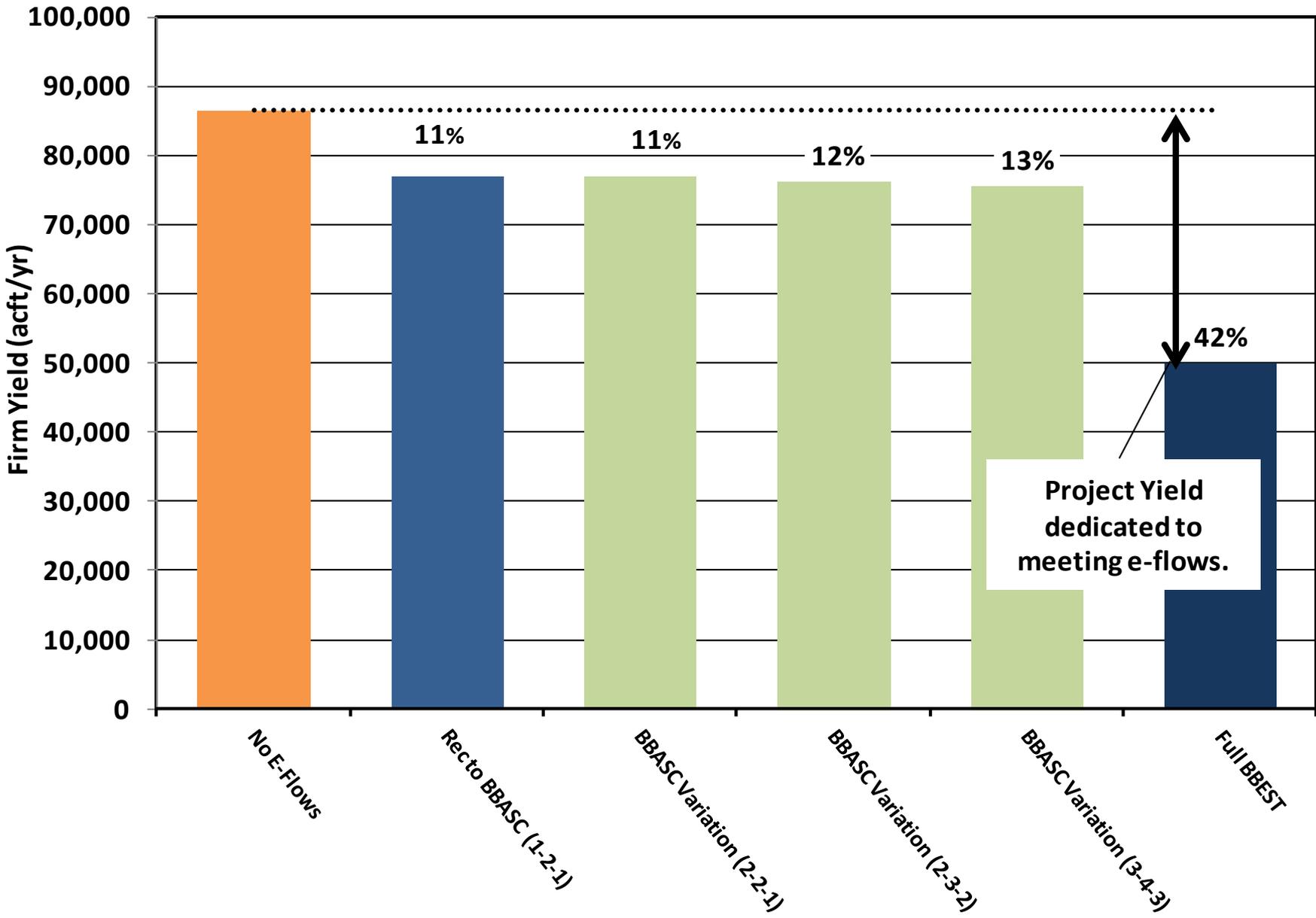
DMFW Resulting Streamflow



Little River Reservoir Firm Yield Summary

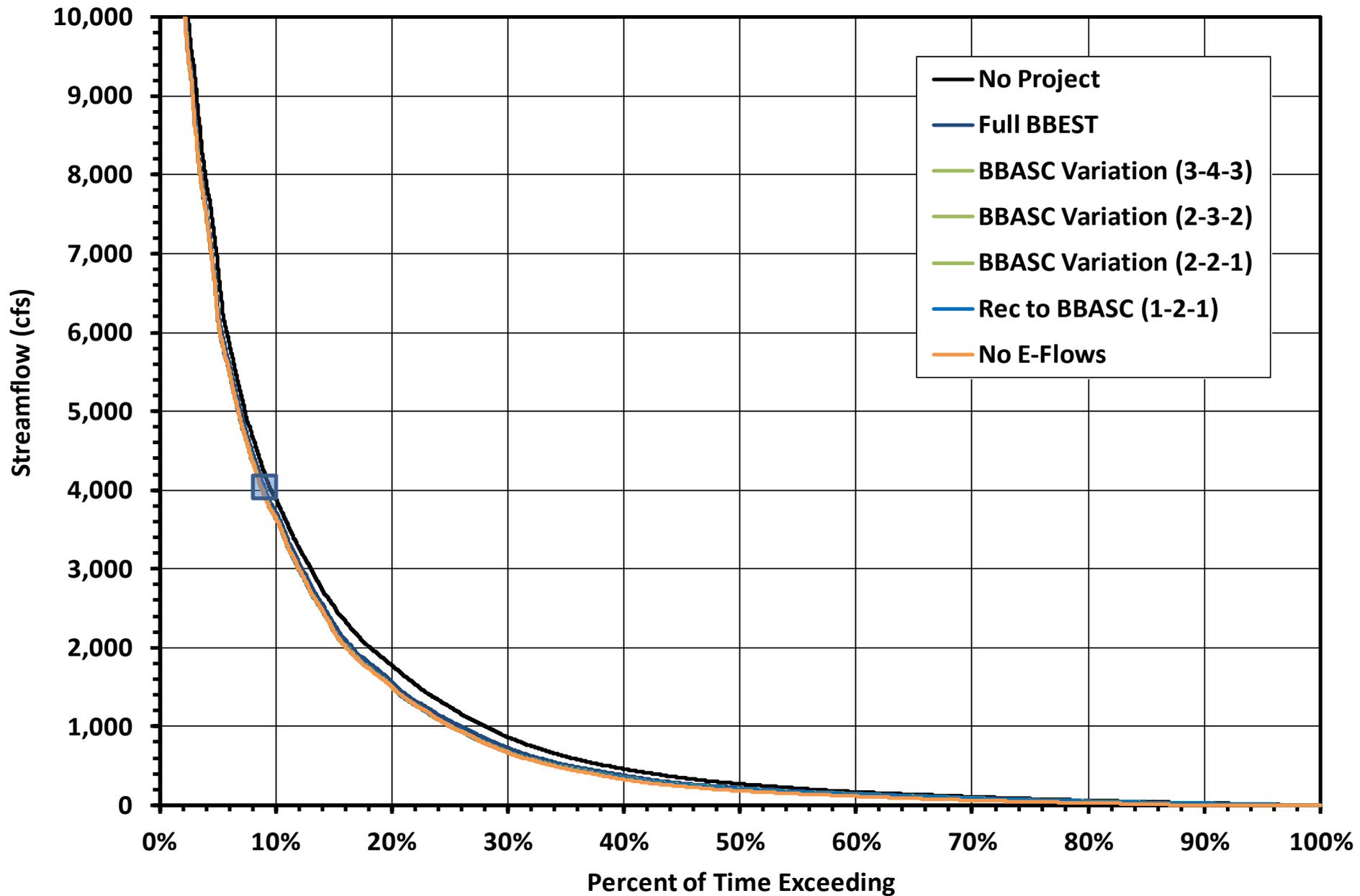


Little River Reservoir

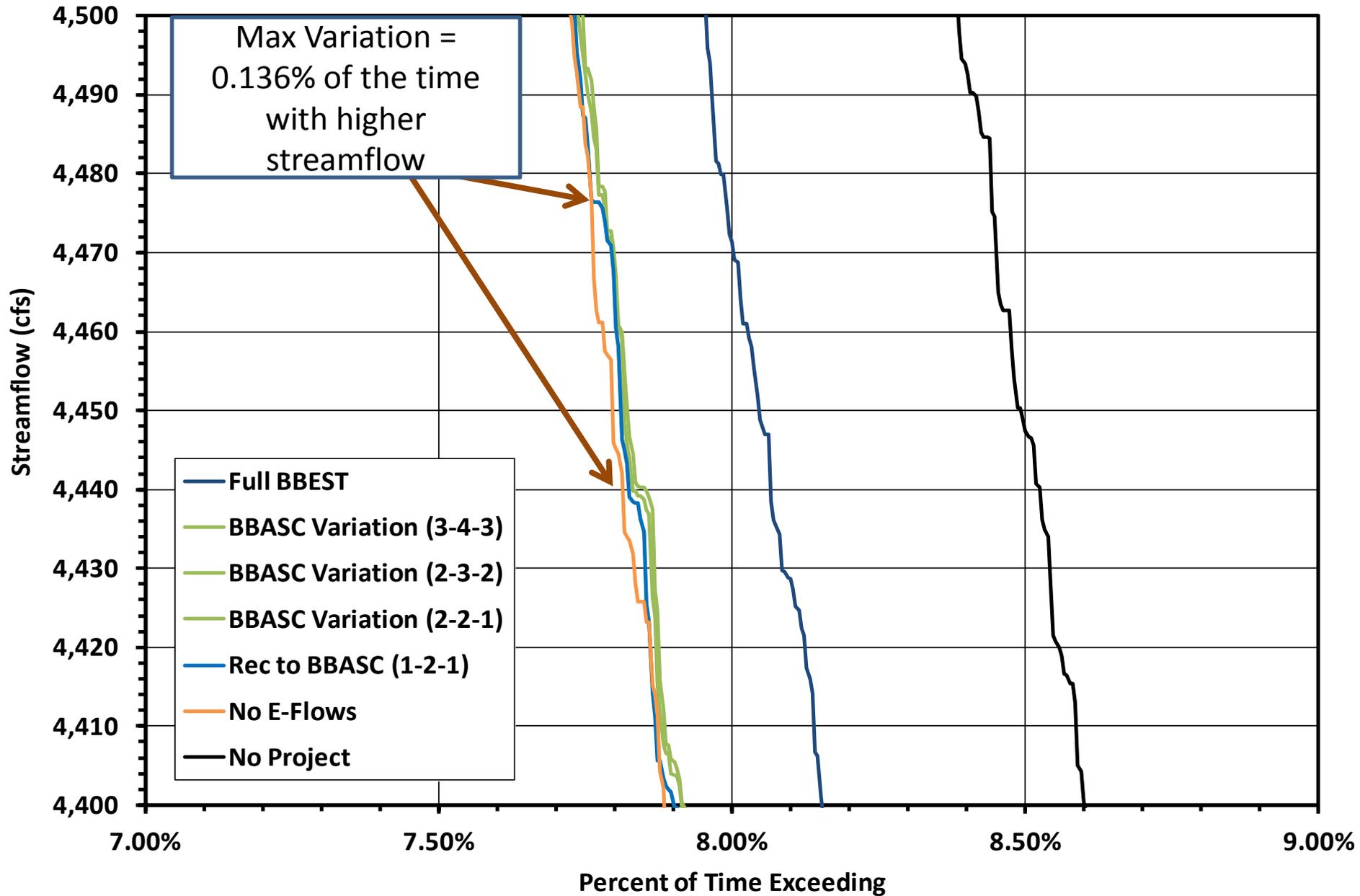


Project Yield
dedicated to
meeting e-flows.

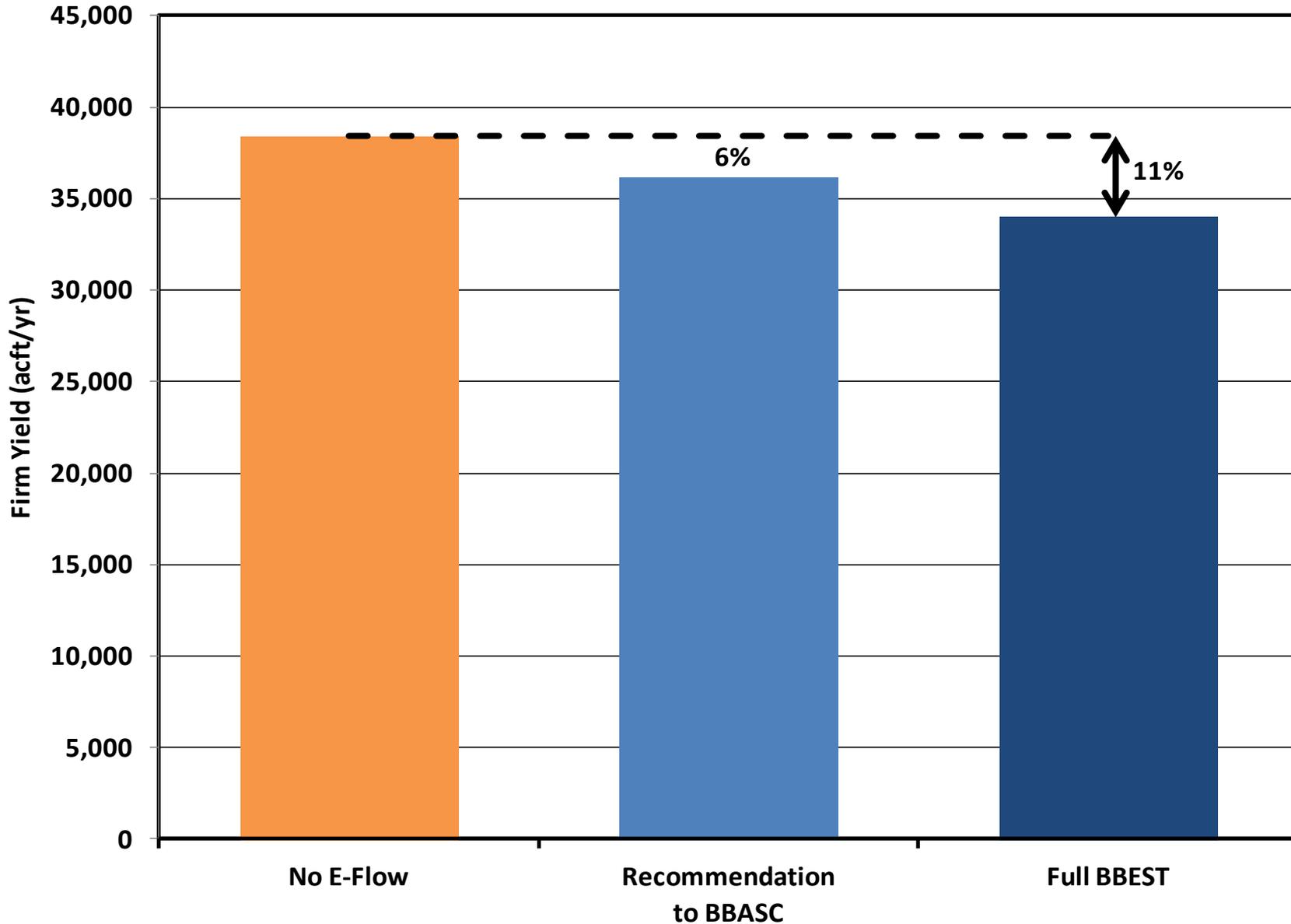
Little River Reservoir Resulting Streamflow



Little River Reservoir Resulting Streamflow



Little River Off-Channel Reservoir Firm Yield Summary



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High Flow Pulses	Wet	Qp: HFP2 Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2	Qp: HFP2 Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2	Qp: HFP2 Average Frequency 1 per season Regressed Volume is HFP2 Duration Bound is HFP2									
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	Dry	Qp:HFP1 cfs with Average Frequency 1 per season Regressed Volume is HFP1 Duration Bound is HFP1	Qp:HFP1 cfs with Average Frequency 1 per season Regressed Volume is HFP1 Duration Bound is HFP1	Qp:HFP1 cfs with Average Frequency 1 per season Regressed Volume is HFP1 Duration Bound is HFP1									
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	Avg	cfs	cfs	cfs									
	Dry	cfs	cfs	cfs									
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		Winter				Spring				Summer			

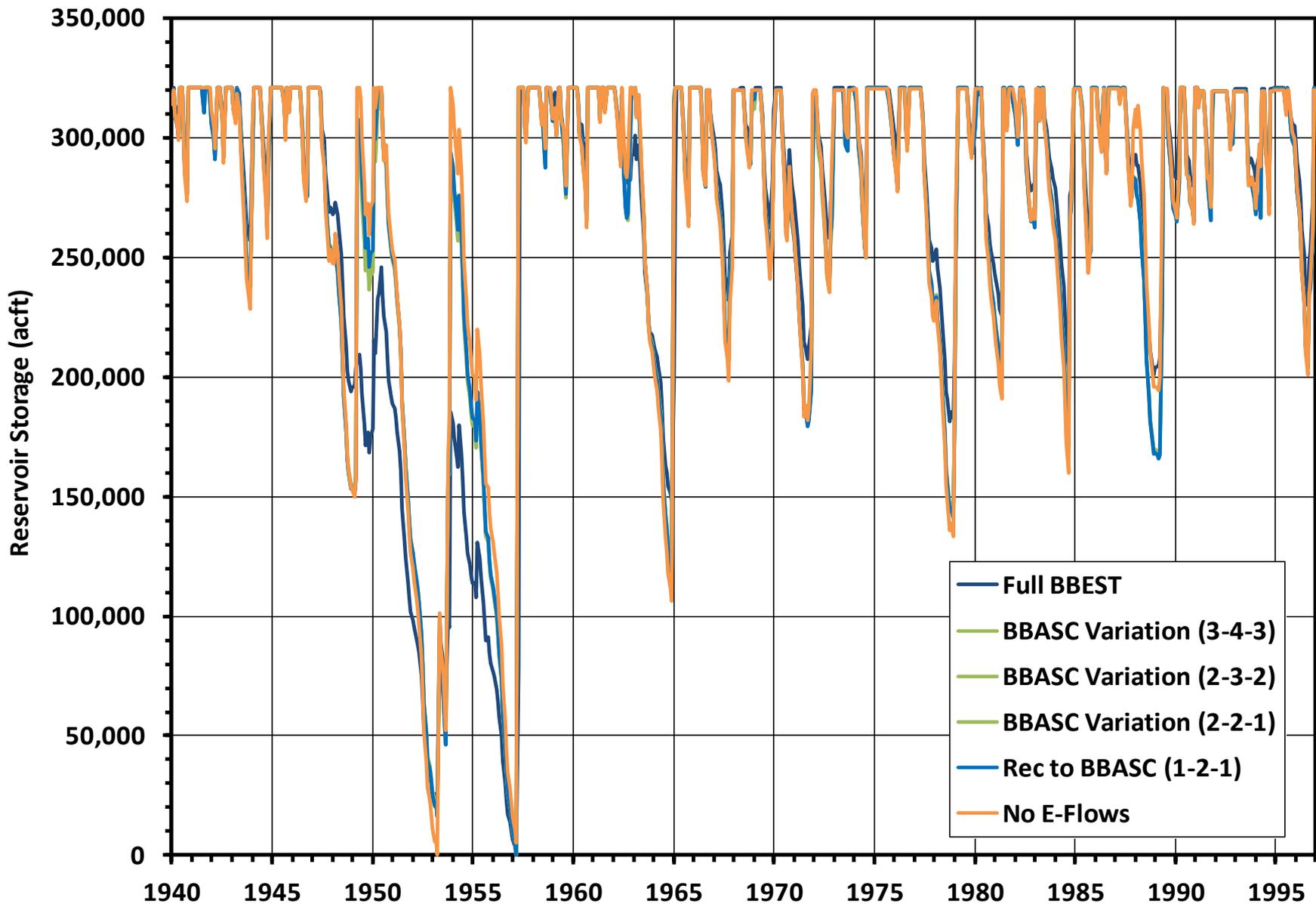
Flow Levels	High (75th %ile)
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Questions



Little River Reservoir Storage Trace



Little River Reservoir Storage Trace

