BUREAU OF RECLAMATION

Impacts of TUCPS

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Introduction

- Temporary Urgency Change Petition (TUCP)
- Reclamation and DWR may jointly submit a TUCP to request that the State Water Board consider modifying requirements of Reclamation's and DWR's water right permits to enable changes in the CVP and SWP
- Include Relaxation of D-1641 requirements to allow management of reservoir releases on a pattern that conserves upstream storage for
  - Fish and wildlife protection
  - Delta salinity control
  - Providing critical water supply needs.
- Only in extreme drought years

State Water Project and Central Valley Project Temporary Urgency Change Petition | California State Water Resources Control Board

2023 Temporary Urgency Change Petition

Documents without hyperlinks are available upon request. To request access please email Bay-Delta@waterboards.ca.gov.

- March 9, 2023 - State Water Board Order modifying the February 21, 2023 Order
  - Executive Director's Order
  - Letter of Transmittal of the ED's Order
  - Comments/Objections/Protests. A Petition for Reconsideration has also been submitted and is identified below
    - CSPA etal Petition for Reconsideration [03/09 and 02/21 Orders]
- February 21, 2023 - State Water Board Order regarding the February 13, 2023 Temporary Urgency Change Petition
  - April 03, 2023 - Condition 4 Plan, Initial
  - March 29, 2023 - Condition 9 Report #1
  - March 14, 2023 - Condition 8 Report
  - March 07, 2023 - Condition 3 Report from DWR 02/21-03/13/23
  - Comments/Objections/Protests. A Petition for Reconsideration has also been submitted and is identified below.
    - South Delta Water Agency and Central Delta Water Agency
    - CSPA et al Objection TUCP
    - WCWD & JWDB (Feather River Agencies)
    - Richard Morat
    - NRDC et al Petition for Reconsideration
    - NRDC et al Petition_Appendix
- February 20, 2023 - CDFW Letter to SWRCB identifying no substantial impacts to fish and wildlife from the TUCP
- February 13, 2023 – SWRCB Notice of Temporary Urgency Change Petition
- February 13, 2023 – Temporary Urgency Change Petition for February 1, 2023, through March 31, 2023
  - Modeled Forecast Results
  - Comments/Objections
    - California Department of Fish and Wildlife
    - Natural Resource Defense Council, Sierra Club California, Pacific Coast Federation of Fishermen's Association, Golden State Salmon, The Bay Institute, Defenders of Wildlife, San Francisco Baykeeper, California Sportfishing Protection Alliance, Restore the Delta, Save California Salmon
    - State Water Contractors
    - Support Letter, US Representative LaMalfa, et al
    - NMFS Letter to Reclamation Re Technical Assistance
    - USFWS Letter to Reclamation Re Technical Assistance

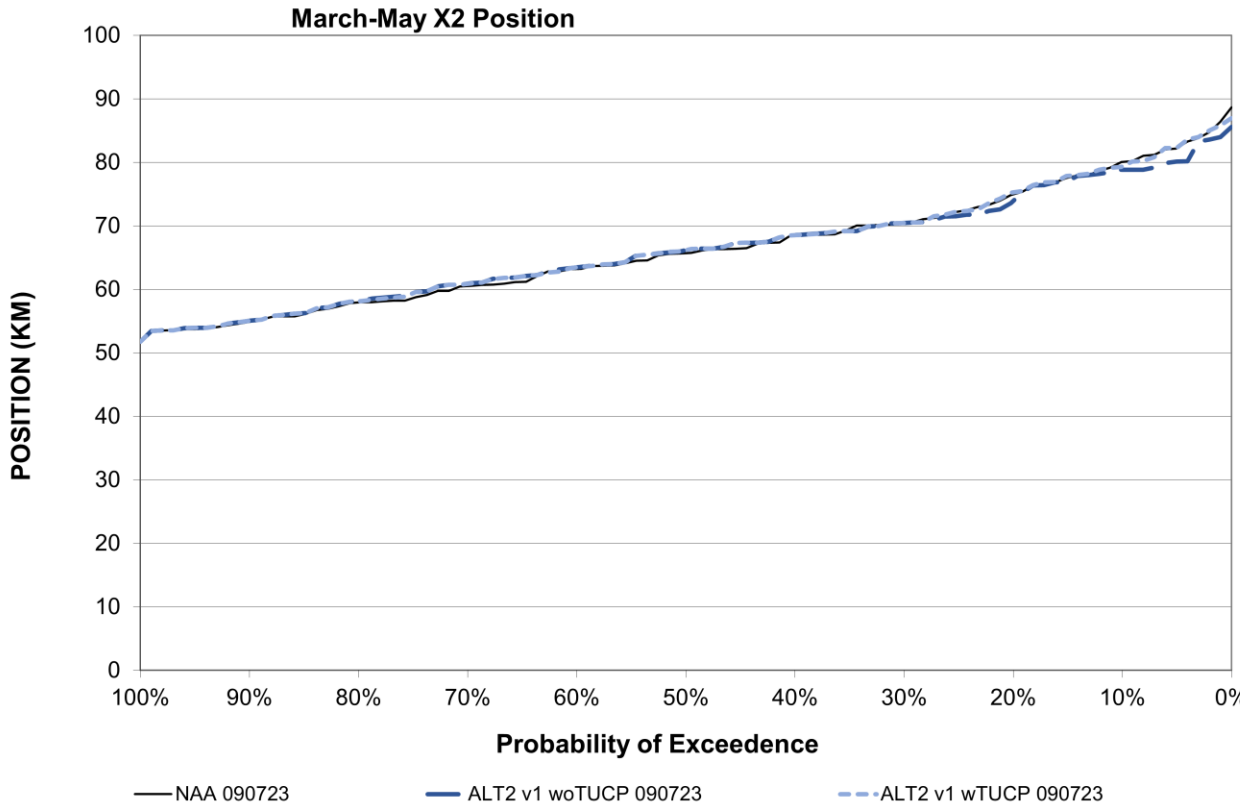
Modeling TUCP Assumptions

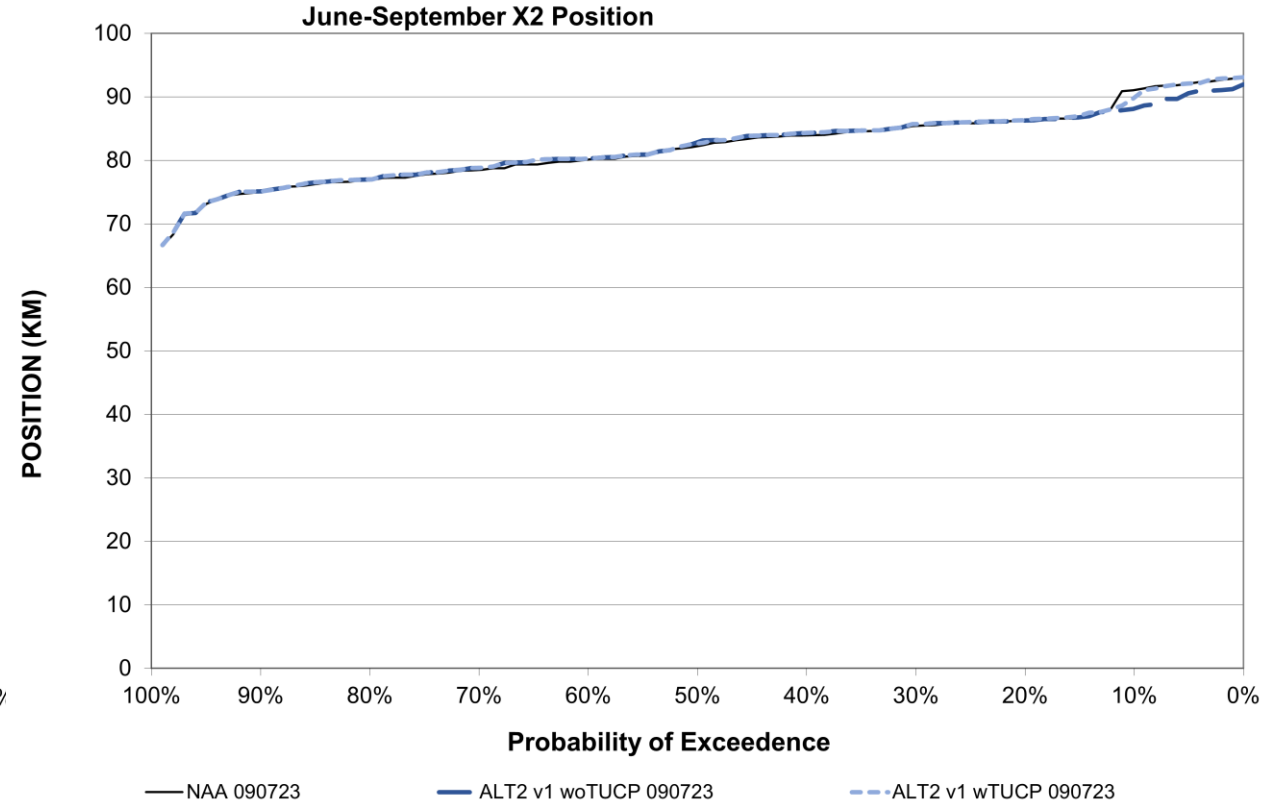
- Used in NAA, Alt4, and Alt2 Sensitivity
- Triggered by extreme conditions for SacIndex, Shasta, or both
- February-April – relax D-1641 X2 requirements
- May-September
  - D-1641 Emmaton EC standard moved to Three Mile Slough (req't adjusted)
  - D-1641 NDOI standard May = 4000 cfs, June-Sept = 3000 cfs
- Exports are limited if Delta Outflow is now above 7100 cfs Feb-Apr, 4000 cfs May-June, or NDOI std July-Sept
  - H&S Pumping of 1500 cfs when operations are upstream controlled
  - Possibly as low as 1100 cfs to relax storage releases in extreme conditions
- Summer increment to CVP SOD allocation is off if TUCPs are on

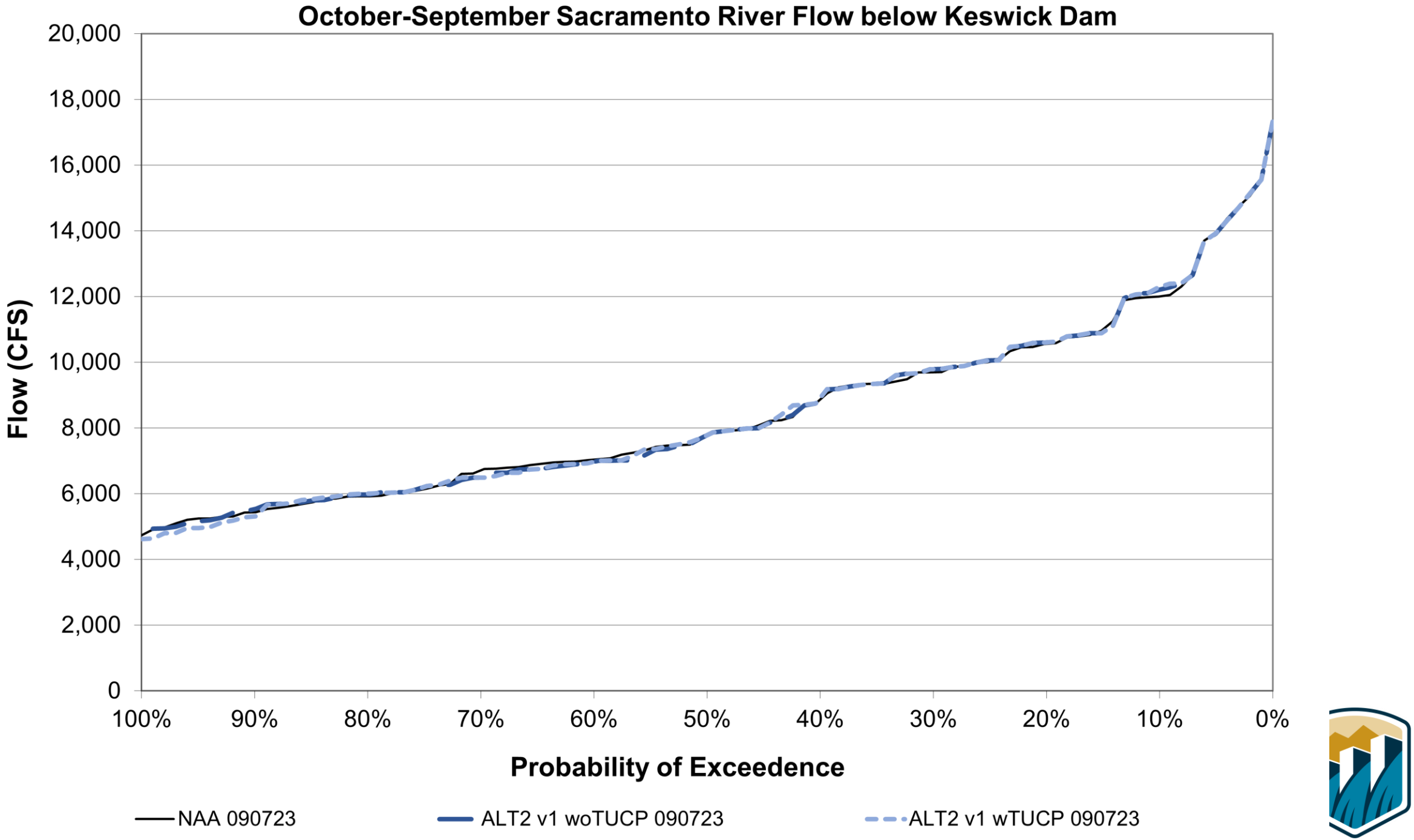
Monthly TUCP Triggering Criteria

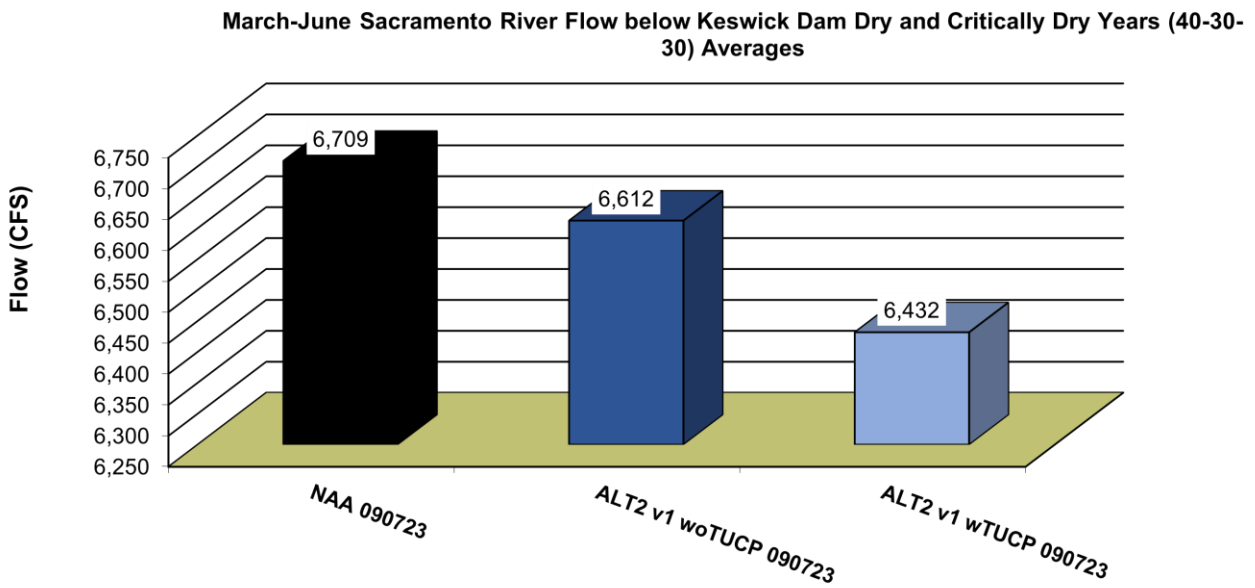
Month	Sacramento River Valley Water Year Index Threshold (TAF)	Lake Shasta Previous Month Storage Threshold (TAF)	Combined Sacramento River Valley Water Year Index and Lake Shasta Previous Month Storage Threshold (TAF)
February	6000	2700	7200
March	5900	2800	7200
April	5300	3050	7200
May	5300	3000	7200

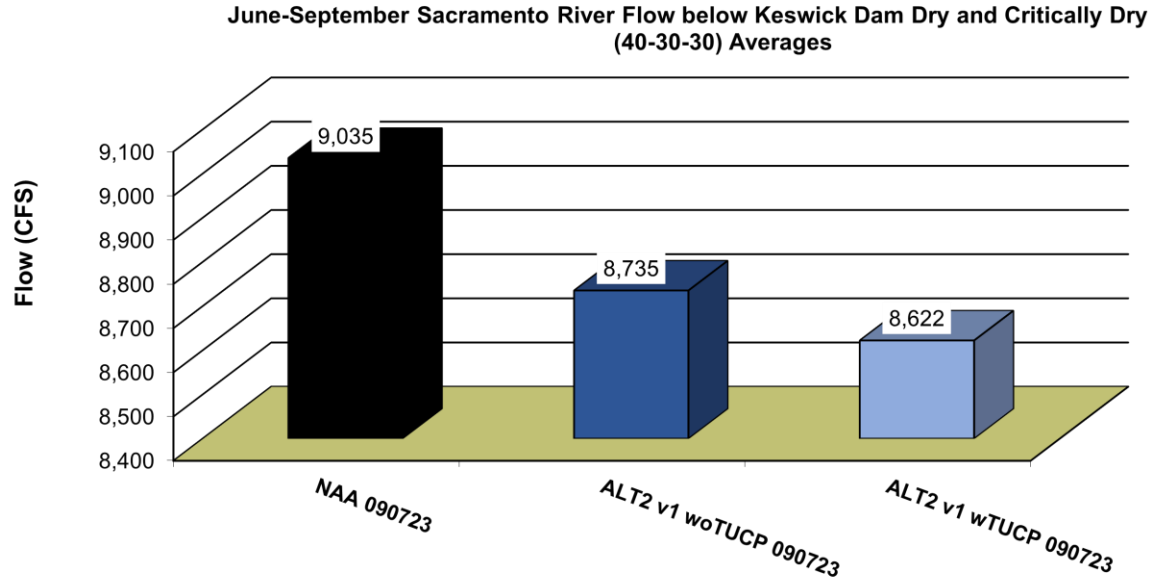
Modeled TUCPs are triggered when at least two of the above criteria are below the monthly thresholds defined in the table above.

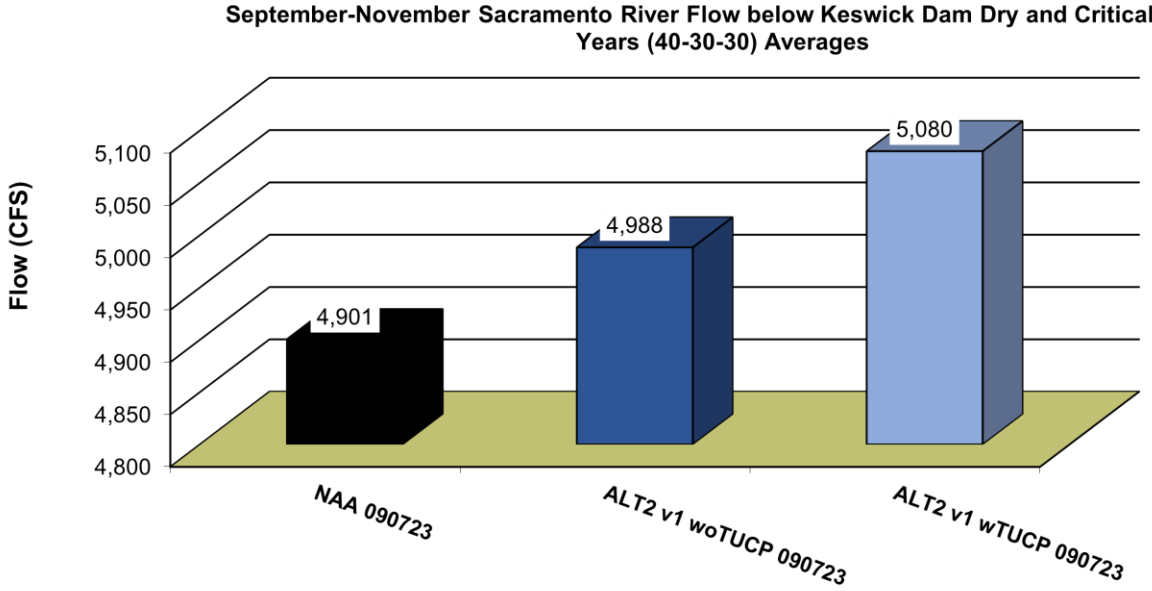

March-May X2 Position
POSITION (KM)
100
90
80
70
60
50
40
30
20
10
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

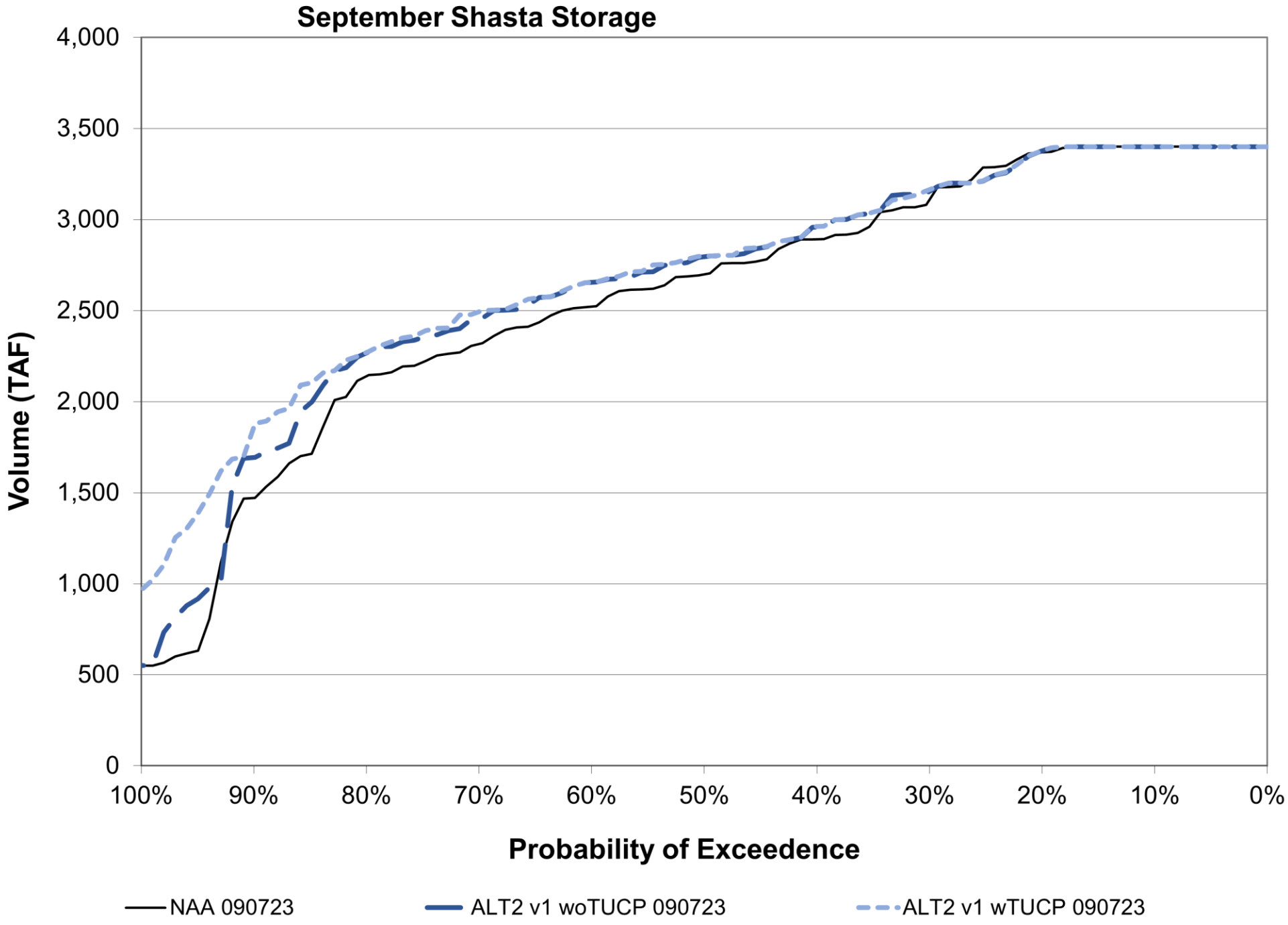

June-September X2 Position
POSITION (KM)
100
90
80
70
60
50
40
30
20
10
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


October-September Sacramento River Flow below Keswick Dam
Flow (CFS)
20,000
18,000
16,000
14,000
12,000
10,000
8,000
6,000
4,000
2,000
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

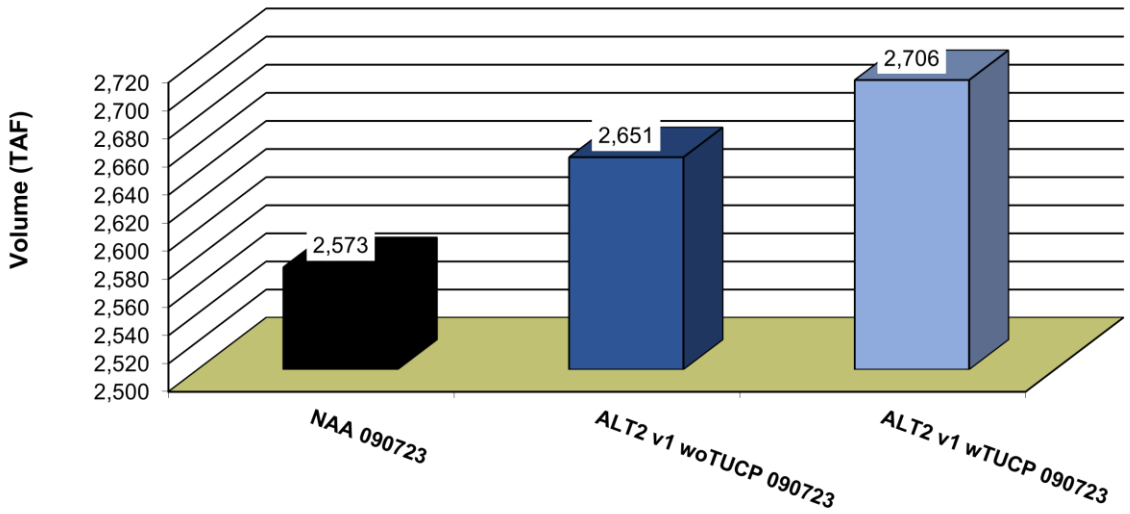

March-June Sacramento River Flow below Keswick Dam Dry and Critically Dry Years (40-30-30) Averages
Flow (CFS)
6,750
6,700
6,650
6,600
6,550
6,500
6,450
6,400
6,350
6,300
6,250
6,709
6,612
6,432
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


June-September Sacramento River Flow below Keswick Dam Dry and Critically Dry Years (40-30-30) Averages
Flow (CFS)
9,100
9,000
8,900
8,800
8,700
8,600
8,500
8,400
9,035
8,735
8,622
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

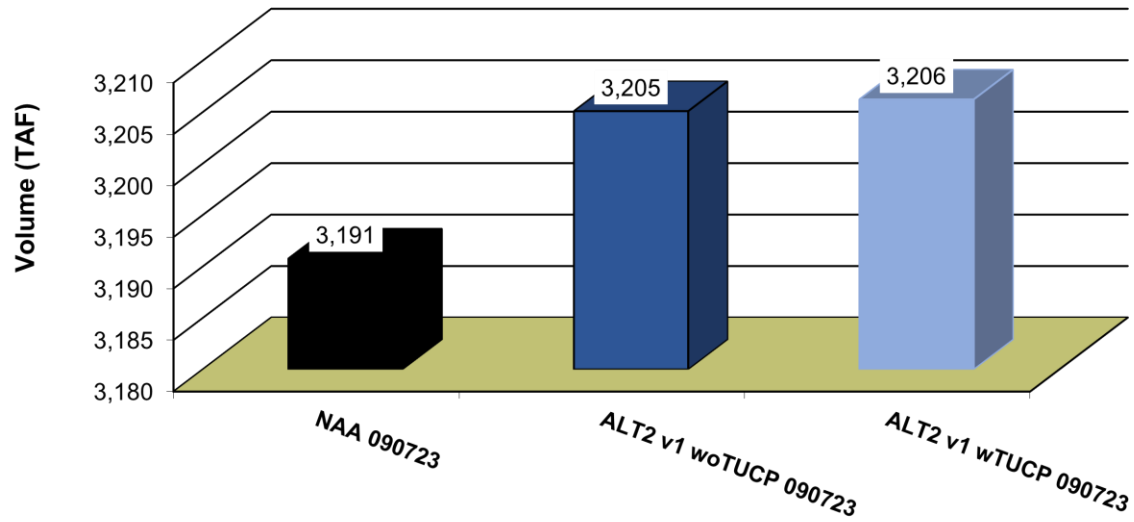

September-November Sacramento River Flow below Keswick Dam Dry and Critically Dry Years (40-30-30) Averages
Flow (CFS)
5,100
5,050
5,000
4,950
4,900
4,850
4,800
4,901
4,988
5,080
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


September Shasta Storage
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
Volume (TAF)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

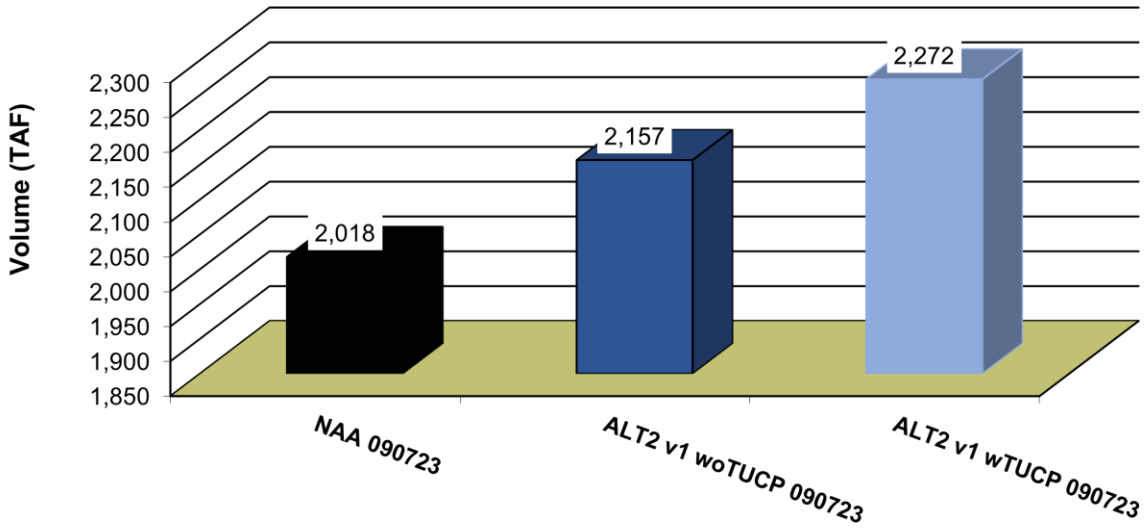
September Shasta Storage Averages

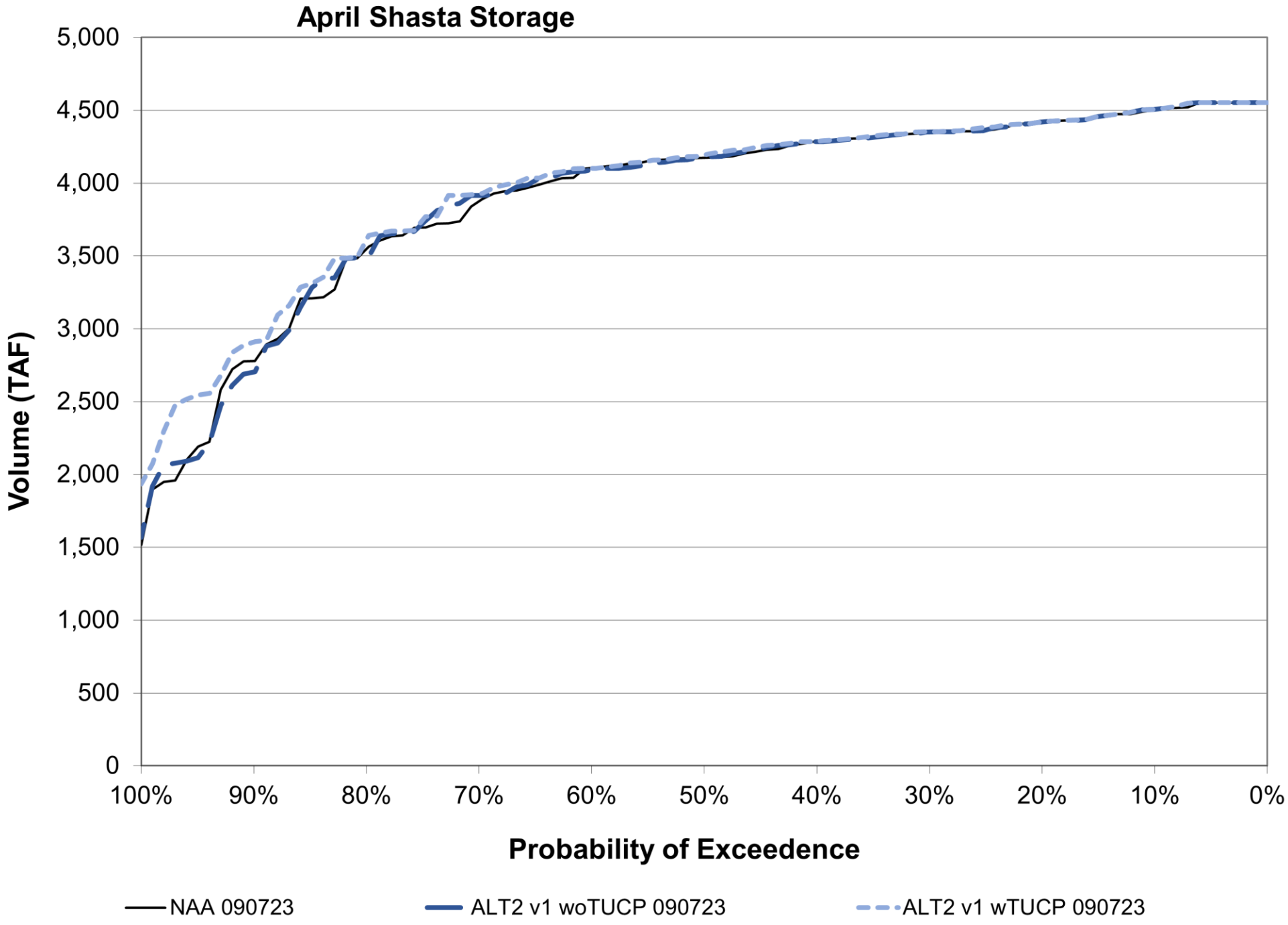


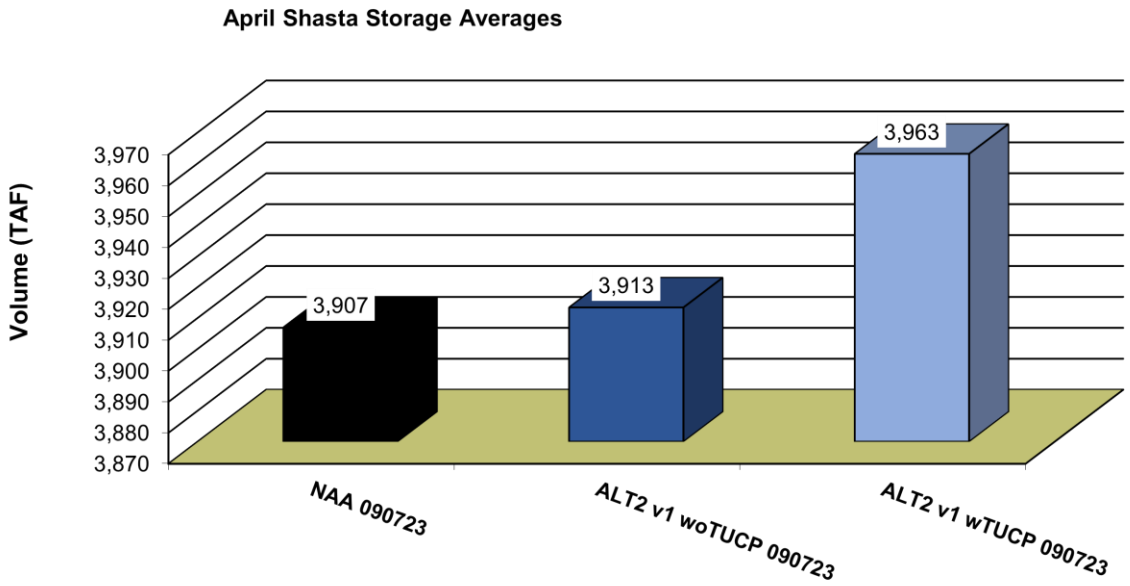
September Shasta Storage Wet Years (40-30-30) Averages

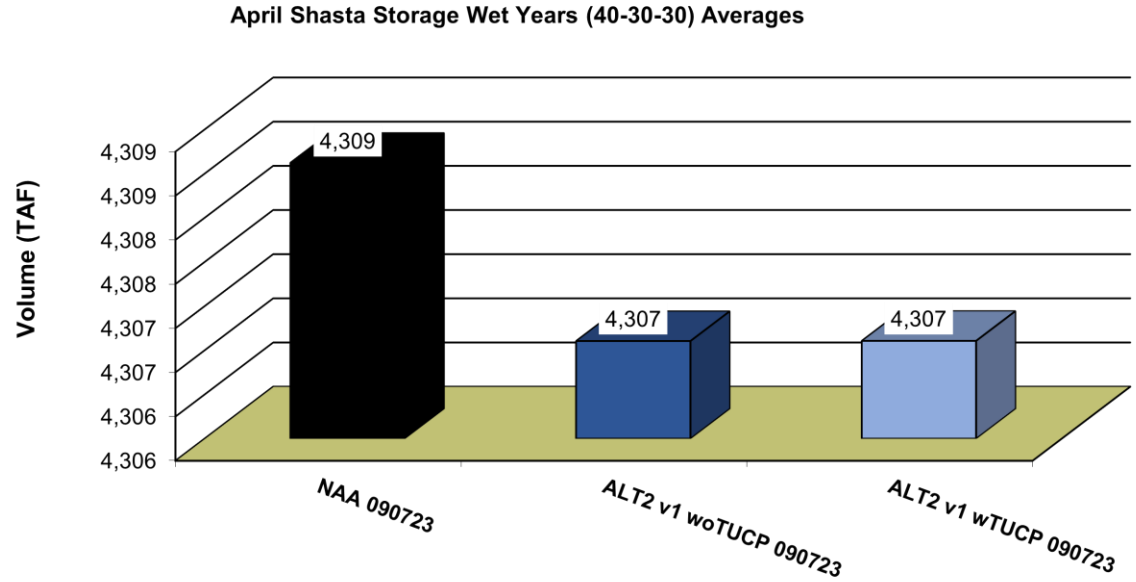


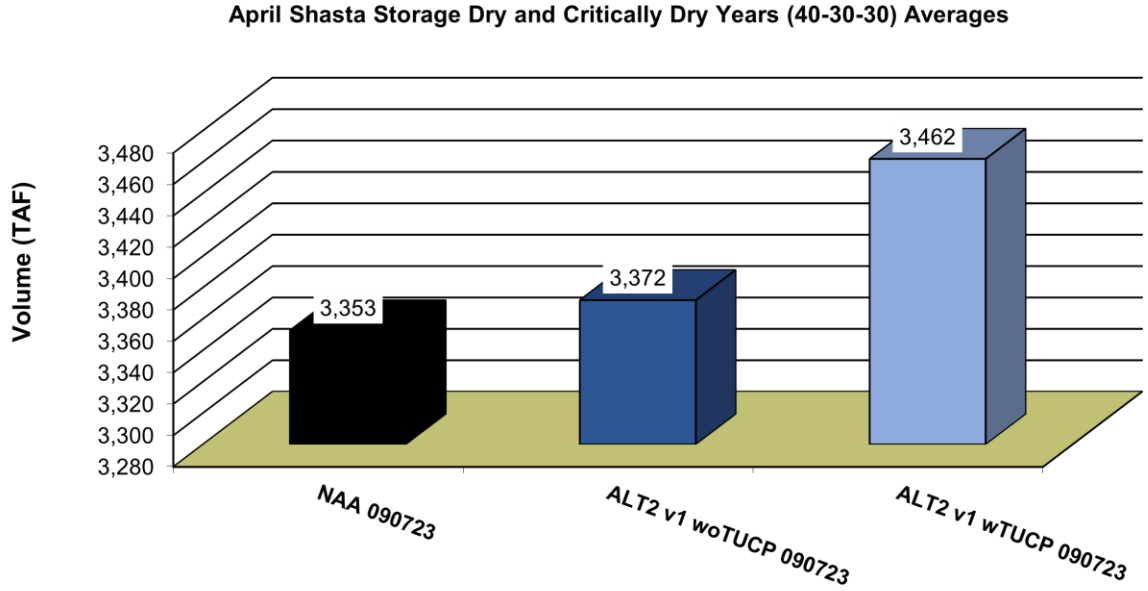
September Shasta Storage Dry and Critically Dry Years (40-30-30) Averages

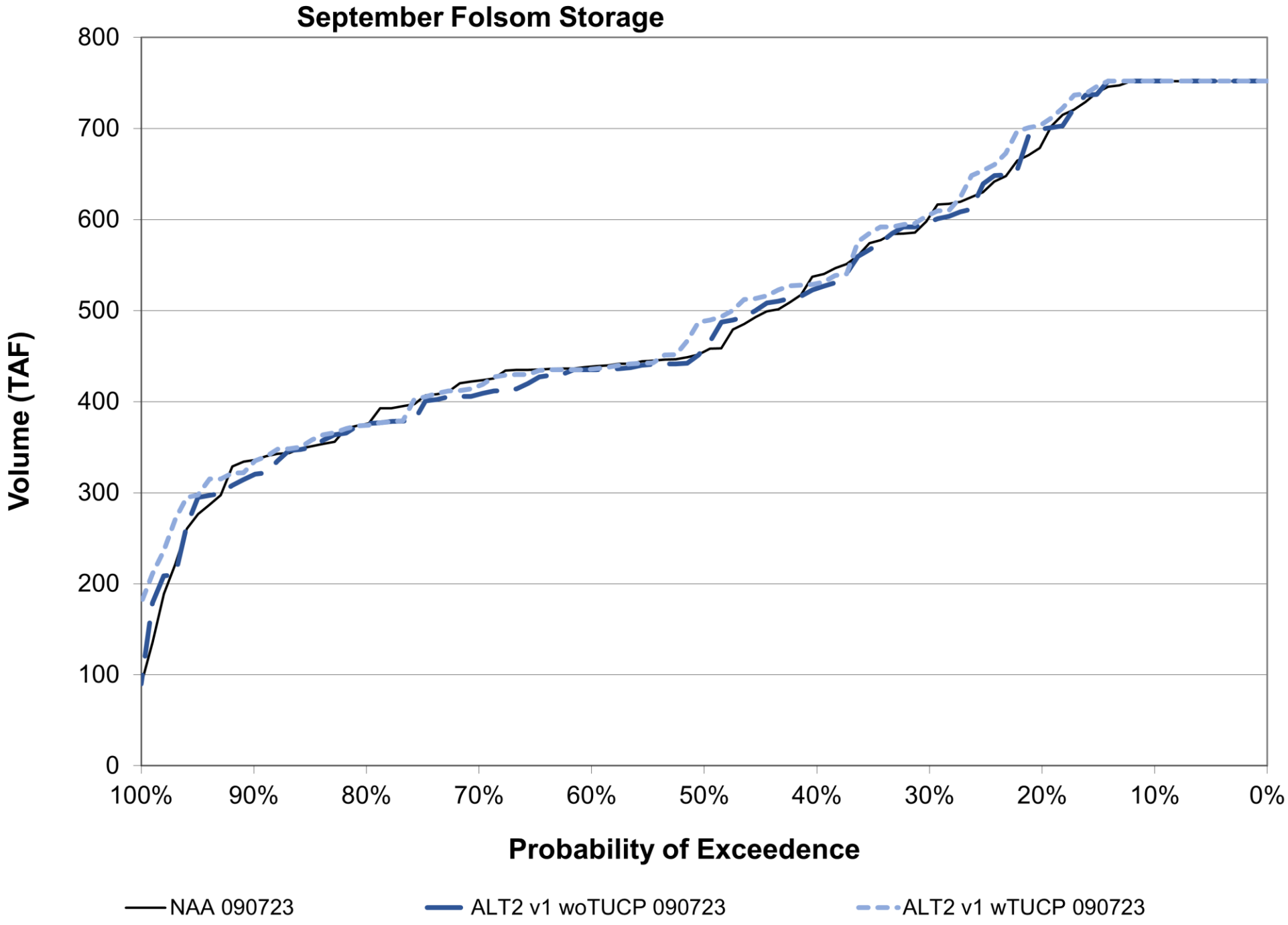



April Shasta Storage
Volume (TAF)
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

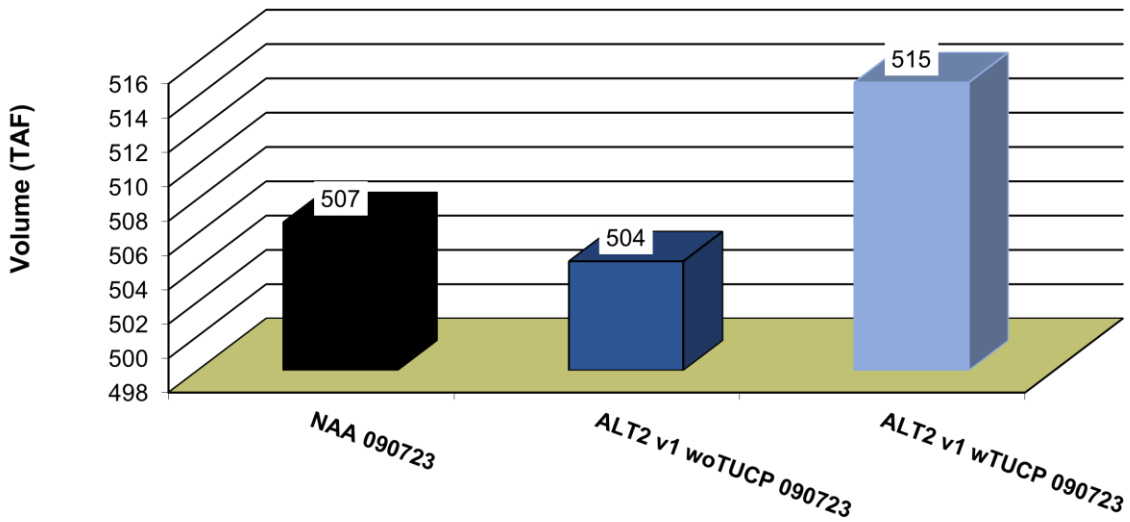

April Shasta Storage Averages
Volume (TAF)
3,970
3,960
3,950
3,940
3,930
3,920
3,910
3,900
3,890
3,880
3,870
3,907
3,913
3,963
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


April Shasta Storage Wet Years (40-30-30) Averages
Volume (TAF)
4,309
4,309
4,308
4,308
4,307
4,307
4,306
4,306
4,309
4,307
4,307
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

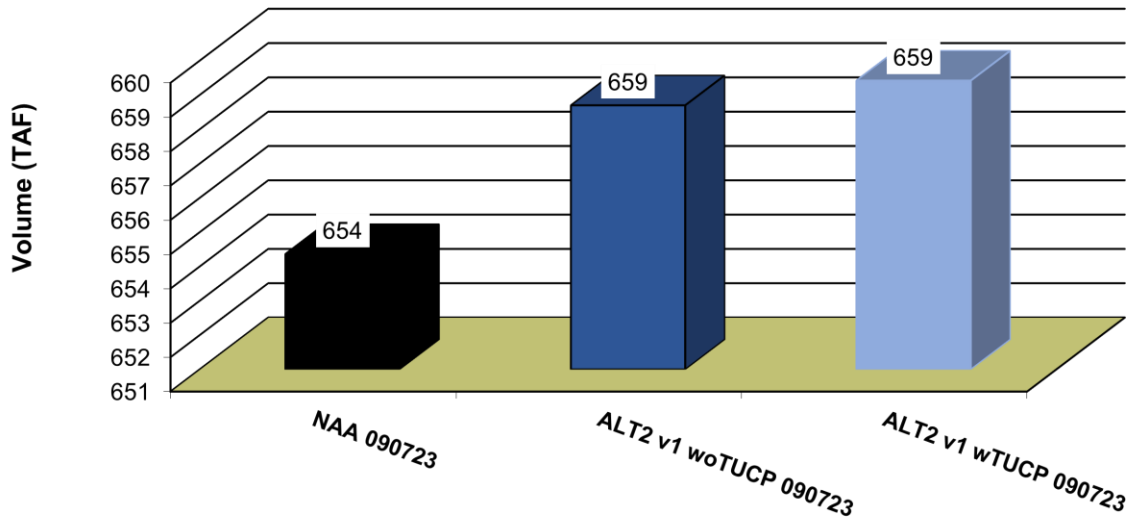

April Shasta Storage Dry and Critically Dry Years (40-30-30) Averages
Volume (TAF)
3,480
3,460
3,440
3,420
3,400
3,380
3,360
3,340
3,320
3,300
3,280
3,353
3,372
3,462
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


September Folsom Storage
Volume (TAF)
800
700
600
500
400
300
200
100
0
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

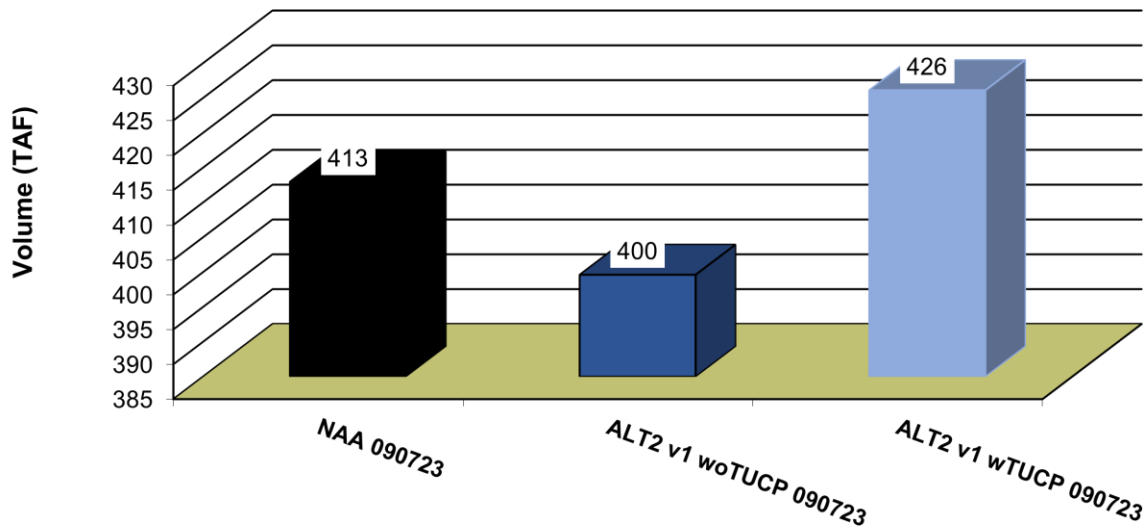
September Folsom Storage Averages

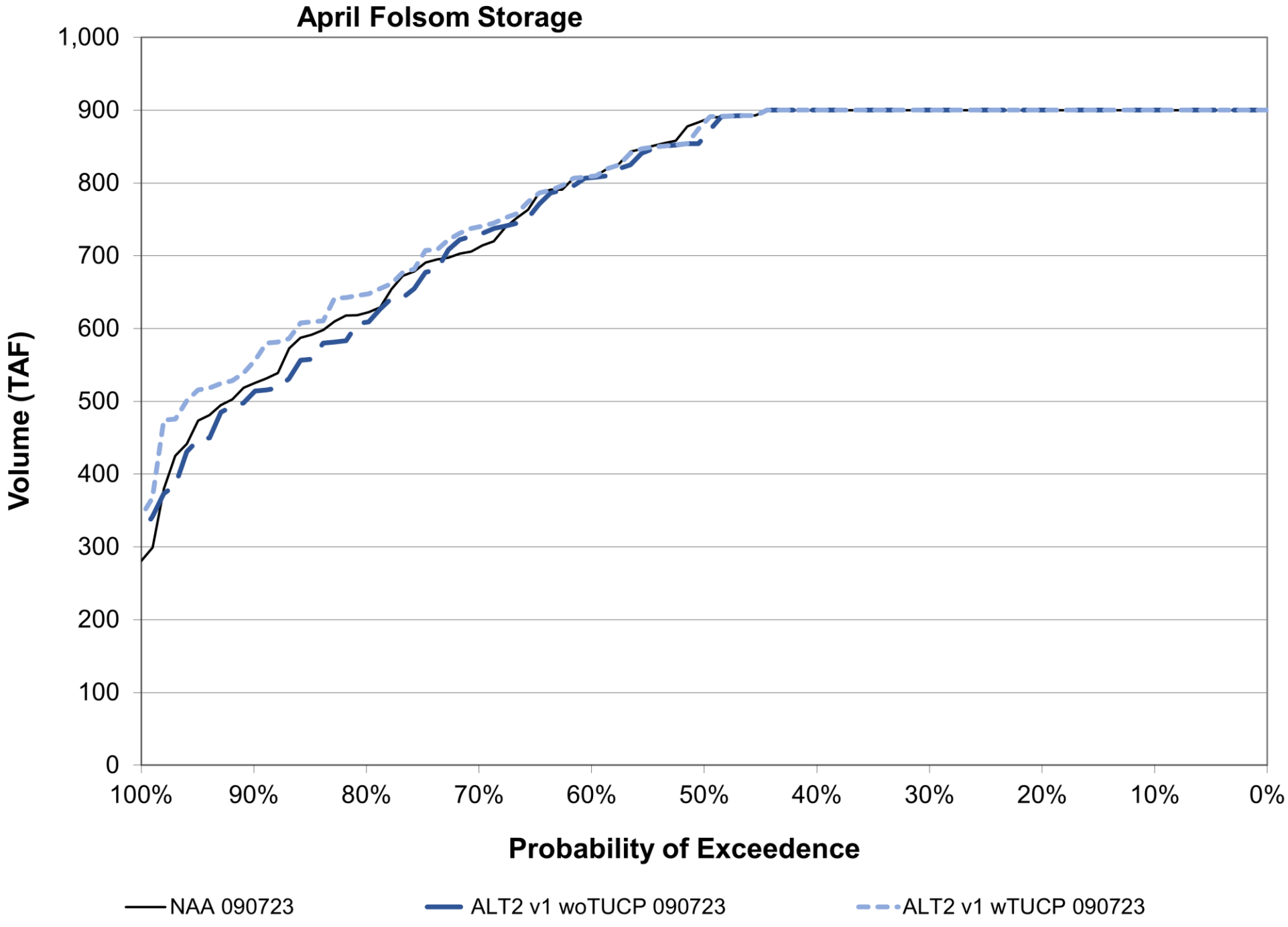


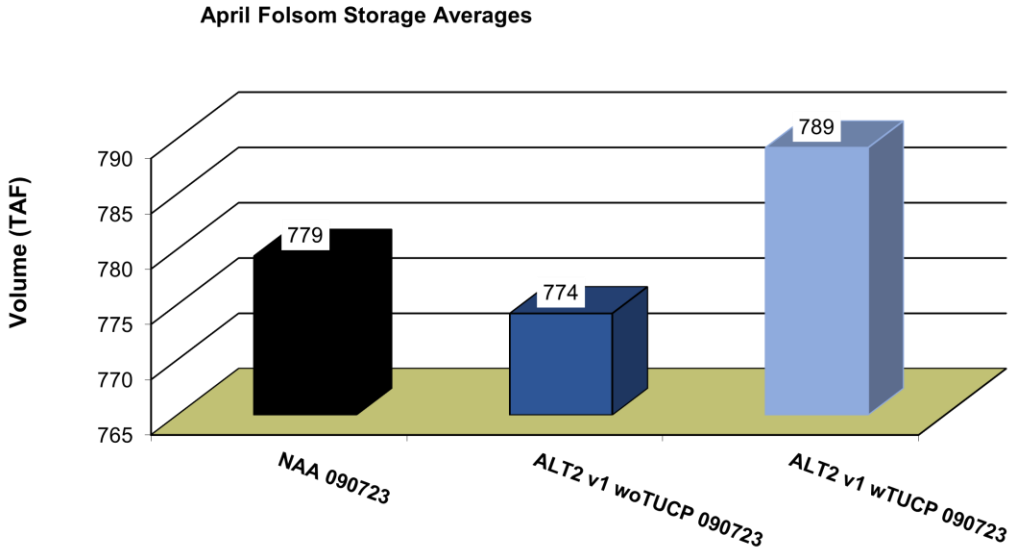
September Folsom Storage Wet Years (40-30-30) Averages

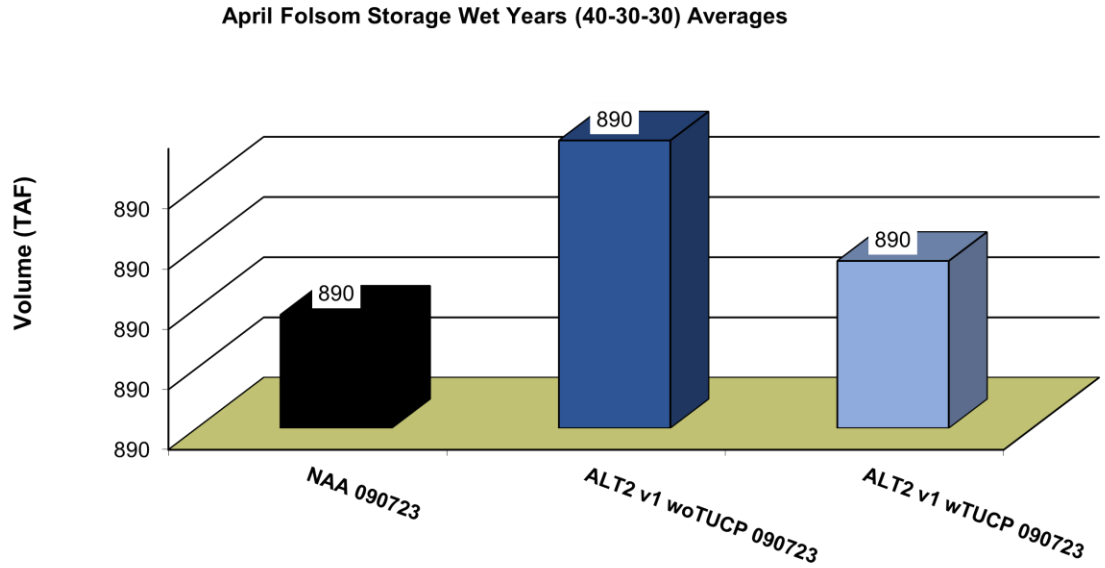


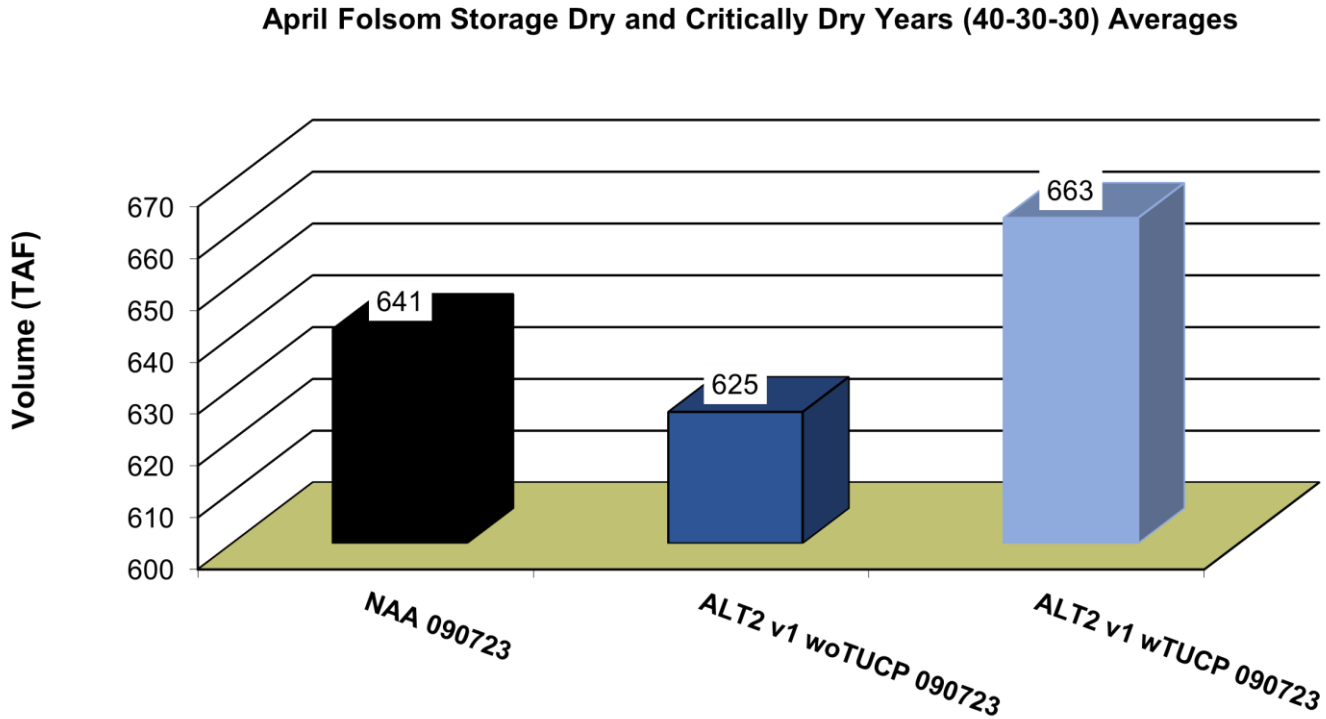
September Folsom Storage Dry and Critically Dry Years (40-30-30) Averages




April Folsom Storage
1,000
900
800
700
600
500
400
300
200
100
0
Volume (TAF)
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
Probability of Exceedence
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


April Folsom Storage Averages
Volume (TAF)
790
785
780
775
770
765
779
774
789
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


April Folsom Storage Wet Years (40-30-30) Averages
Volume (TAF)
890
890
890
890
890
890
890
890
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723


April Folsom Storage Dry and Critically Dry Years (40-30-30) Averages
Volume (TAF)
670
660
650
640
630
620
610
600
641
625
663
NAA 090723
ALT2 v1 woTUCP 090723
ALT2 v1 wTUCP 090723

Conclusions

- TUCPs requested by Reclamation and DWR in extreme drought years
- Include Relaxation of D-1641 requirements to allow management of reservoir releases on a pattern that conserves upstream storage for
  - Fish and wildlife protection
  - Delta salinity control
  - Providing critical water supply needs.
- CalSim3 implementation exhibits reduced Sacramento river flow in spring and summer, increased flow in fall
- Increased end of April and end of September storage; especially in drought years

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BUREAU OF
RECLAMATION