

MOBILE DISTRICT

O&M PROGRAM OVERVIEW

for the

TRI RIVERS ANNUAL MEETING

November 22, 2002



FY 02 O&M APPROPRIATION

ACF Rivers:

\$ 8.0M Routine Operation and Maintenance

4.9M Beneficial use of sand (Site 40)

\$12.9M



FY 03 O&M PROGRAM

(\$000)

<u>Project</u>	<u>Pres</u>	<u>House</u>	<u>Senate</u>	<u>Conf</u>
ACF	1444	6534	4709	?
WFG	6912	6912	6912	?
Woodruff	6050	7695	6050	?
West Point	5587	5587	5587	?
<u>Lanier</u>	<u>8060</u>	<u>8060</u>	<u>8060</u>	<u>?</u>
Subtotal:	28053	34788	31318	
Mobile District				
Total:	143,191	189,296	159,073	?



PROPOSED FY 03 O&M

ACF Rivers (\$000)

\$3000	Channel Maintenance Dredging
3000	Sand Removal
850	Andrews Lock O&M
1200	Andrews Lock Closure
400	Environmental Work
500	OP and EN support
<u>200</u>	Misc. expenses
\$9150	Total Proposed Expenditures



A photograph of a riverbank with dense green trees and a small building in the distance. The text is overlaid on the image.

Apalachicola River Navigation Project

**Status and Progress in Implementation of
Water Quality Certification Conditions**

**Tri-Rivers Waterway Development Association
Annual Meeting – 22 November 2002**

Major Requirements of Current WQC

- **No Mechanical Redistribution**
- **Develop Long-term Dredged Material Management Plan for Corley Slough Reach (Specific Condition 11)**
- **Plan for Monitoring of Within Bank Disposal Areas/Habitat Areas (Specific Condition 20)**
- **Plan to Establish Acceptable Disposal Site Capacity (Specific Condition 21)**
- **Annual Plans for Minor Slough Restoration Actions (Specific Condition 22)**
- **Develop Restoration Plan for Disposal Area 39 (Specific Condition 23)**



Long-term Dredged Material Management Plan for Corley Slough (Specific Condition 11)

- Develop in consultation with the Interagency Team
- D/A 41 and 43 limited to estimated capacity (height & width limit)
- Site rejuvenation of D/A 40 to be considered as an element of plan (potential beneficial uses of dredged material)
- Plan may include structural measures to reduce dredging demand (reasonable assurance that environmental impacts are minimized and adequately mitigated)



Short-term alternative while developing Long-Term DMMP

- **Pump further to more distant previously approved within bank disposal areas**
- **More costly to the project**
- **D/As 45A and 47A coordinated with I/A team and approved for use in 2001**

Consider Beneficial Uses of Apalachicola River Sand

- **Section 22 Study cost-shared with State of Florida**
 - Completed Oct 01
 - Beneficial use of sand for Beach Restoration or Beach Protection projects
- **Additional project authority and funds obtained in FY02**
 - \$4.9 M O&M funds
 - Disposal site rejuvenation projects
 - Beneficial use projects in coastal Florida
 - Phase 1 initiated in Spring 02
 - Phase 1/Phase 2 during high water periods
 - Sand removal over 2 to 3 year period

Plan for Monitoring Impacts of Within Bank Disposal (Specific Condition 20)

- **Draft plan submitted in May 2000**
- **Both banks of the Apalachicola River have been mapped**
 - Lower river: summer of 1998
 - Upper river: summer of 1999
- **GIS maps prepared**
- **Monitoring plan approved by FDEP**



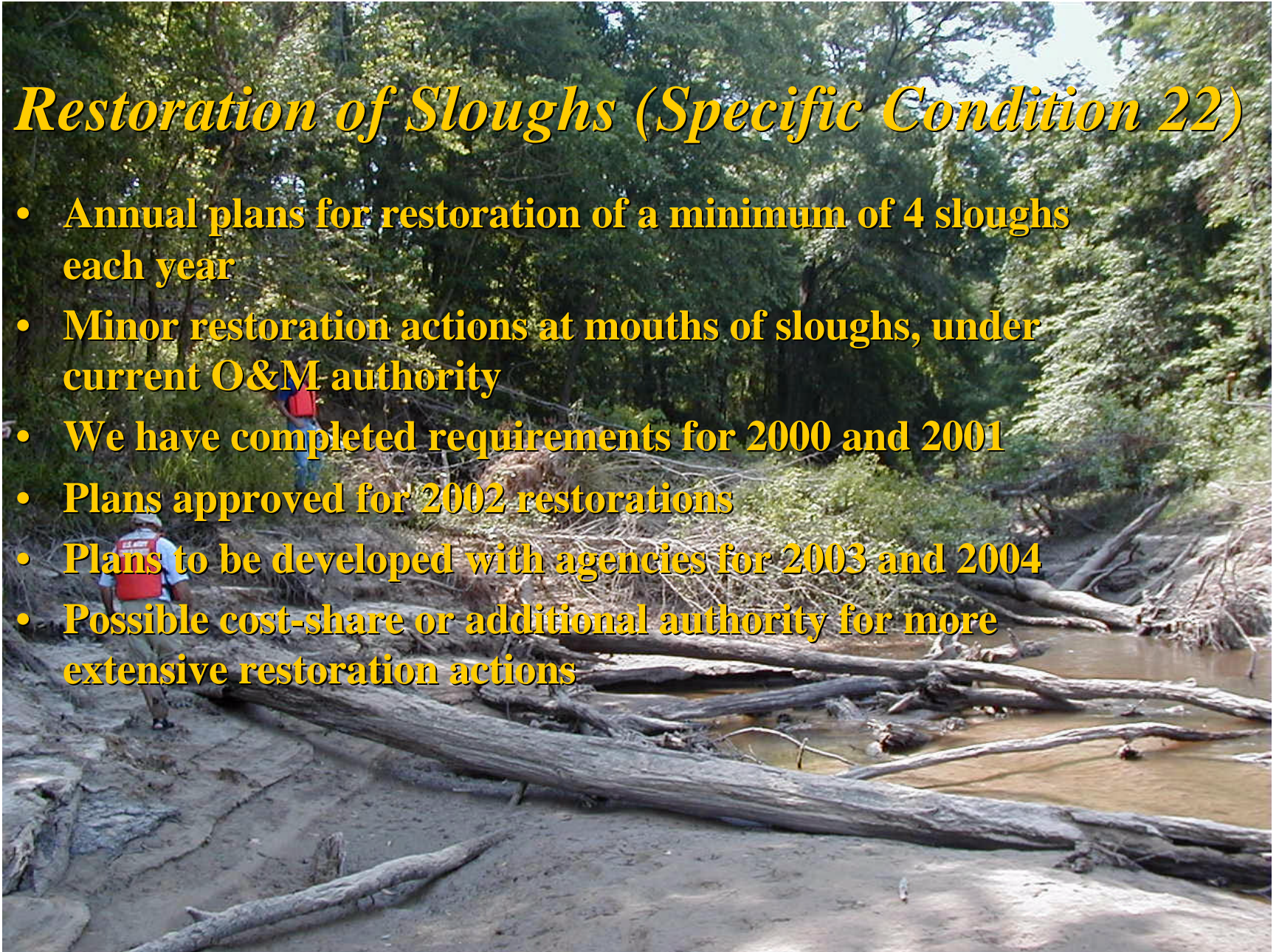


Plan to Establish Disposal Area Capacity (Specific Condition 21)

- Draft Plan submitted in May 2000
- Height limit for within bank disposal sites (natural river bank/high water elevation)
- 100-foot width limit on all within bank disposal areas
- Hypothetical capacity computed for each site
- Management plan approved by FDEP
 - Case-by-case review for specific disposal areas

Restoration of Sloughs (Specific Condition 22)

- Annual plans for restoration of a minimum of 4 sloughs each year
- Minor restoration actions at mouths of sloughs, under current O&M authority
- We have completed requirements for 2000 and 2001
- Plans approved for 2002 restorations
- Plans to be developed with agencies for 2003 and 2004
- Possible cost-share or additional authority for more extensive restoration actions



Restoration of D/A 39 (Specific Condition 2)

- **Sect. 22 study: Develop plan for beneficial use of sand**
- **Cost-shared Sect. 1135 project or under separate project authority**
- **Section 1135 PMP submitted in FY02**
 - **Cost-share partner - NFWFMD**
 - **Awaiting approval and funds**
- **May require separate project authority due to high costs**



Future Actions?

- **Develop DMMP in coordination with FDEP and Interagency Team**
- **Continued Congressional authority and funding**
- **Renewal of WQC for navigation project**
 - **Initiation of pre-application consultation early in FY03**
 - **Current WQC expires Oct 2004**



DA 40 Sand Removal Operation

U.S. Army Corps of Engineers

Mobile District

Terry Jangula



DA 40: “Sand Mountain”



- Located at NM 36.5
- Critical disposal site for Corley Slough reach
- Source of sand for beneficial uses
- Establishes a renewable disposal area for future navigation maintenance



Timeline

- **Oct 2001: FY 2002 O&M Appropriation provided \$4.9M for removal of sand from DA 40 for beneficial uses**
- **Jan 2002: Meeting with Sen. Graham, FDEP and Corps**
- **Feb 2002: Onsite meeting with Contractor**
- **Mar 2002: Sand removal plan submitted to FDEP**
- **Apr 2002: FDEP WQC permit modified**
- **May 2002: Equipment arrives**



Sand Hauling Plan:



- Dozer will feed sand to a dragline
- Dragline will load barges
- Barges will transport material to Gulf County Canal site 10A
- Sand pump will unload barges into site 10A



DA 10A Ready for Use



Challenges

- River levels required dredging to access DA 40
- Mechanical dredging was performed – pipeline dredging not allowed
- Wood debris in dredge material
- Unloading operation lagged loading operation



Mechanical Dredging



- Dredging was hampered by low river conditions and channel width restrictions
- Shallow river conditions limited barge draft



Too much debris



- Wood debris plugged unloading pump
- “Grizzly” added to loading end
- Grizzly screened larger debris
- Reduced pump plugging frequency at unloading site



Unloading Problems



- **Slow unloading delayed river dredging**
- **Problems included:**
 - **Equipment**
 - **Technique**
 - **Debris**



Inductor Pump



- Pumping hindered by wood debris clogging the inductor
- Frequent shutdowns to clean inductor mouth
- Problem reduced with addition of Grizzly at loading site



Technique Revised

- Difficult to remove material from barge due to “post holing” tendency of pump
- Front loader was placed in the barge to feed the pump



DA 40: Lessons Learned

Phase I Demonstrated



- Sand can be removed from DA 40 by clamshell and barges
- River conditions have a major effect on the project
- Rapid barge unloading is crucial to progress
- Clamshell is preferable to pump for unloading barges



FY 2003 Efforts

- Obtain FDEP permit to construct bulkhead allowing mechanical unloading of barges at Gulf County Canal site
- Begin sand removal when bulkhead completed
- Sand removal duration will depend on FY 03 funding
- Possible haulout of sand from Gulf County Site for Beneficial Use when Florida decision is issued



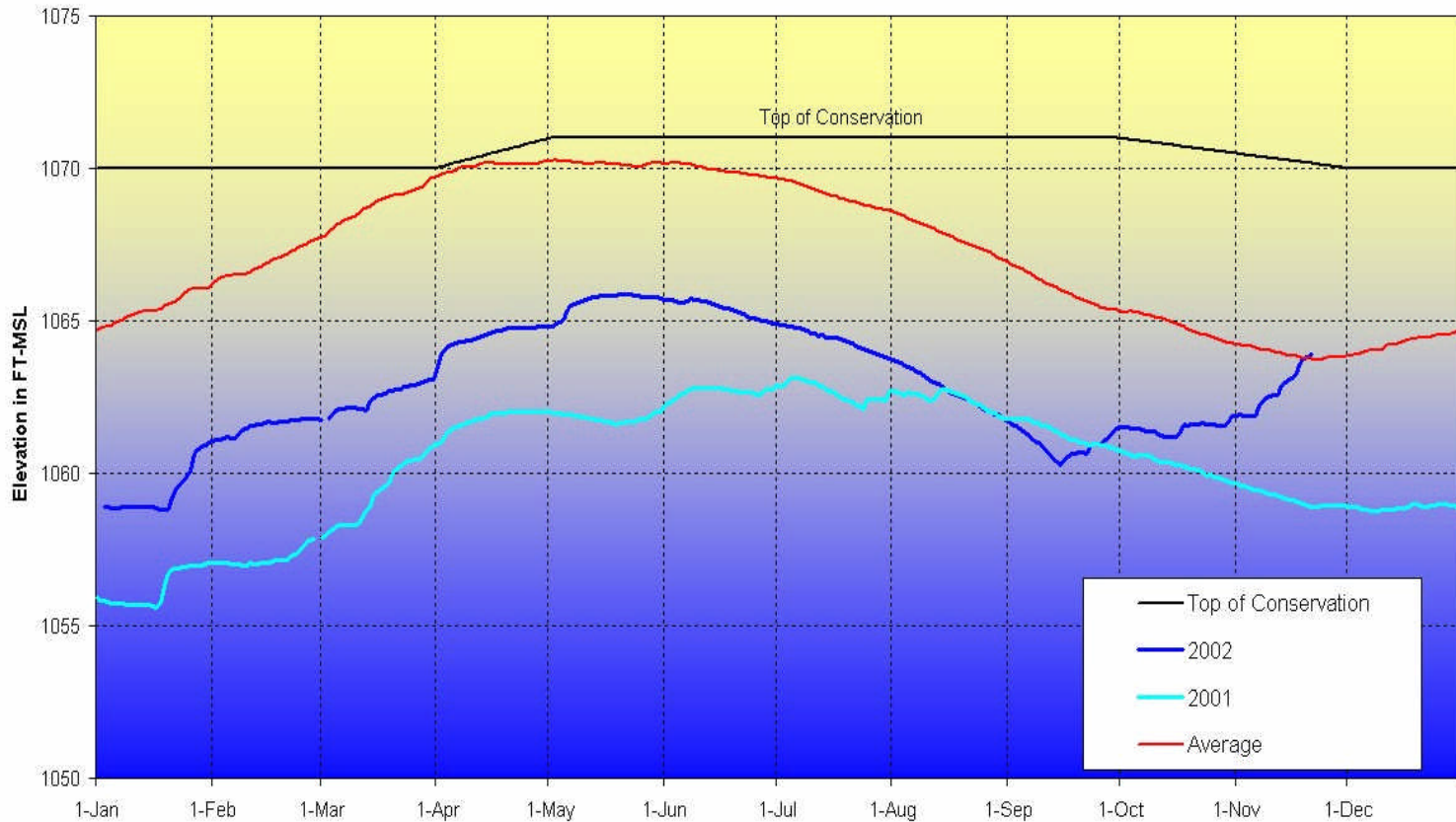
CORPS OF ENGINEERS

Mobile District

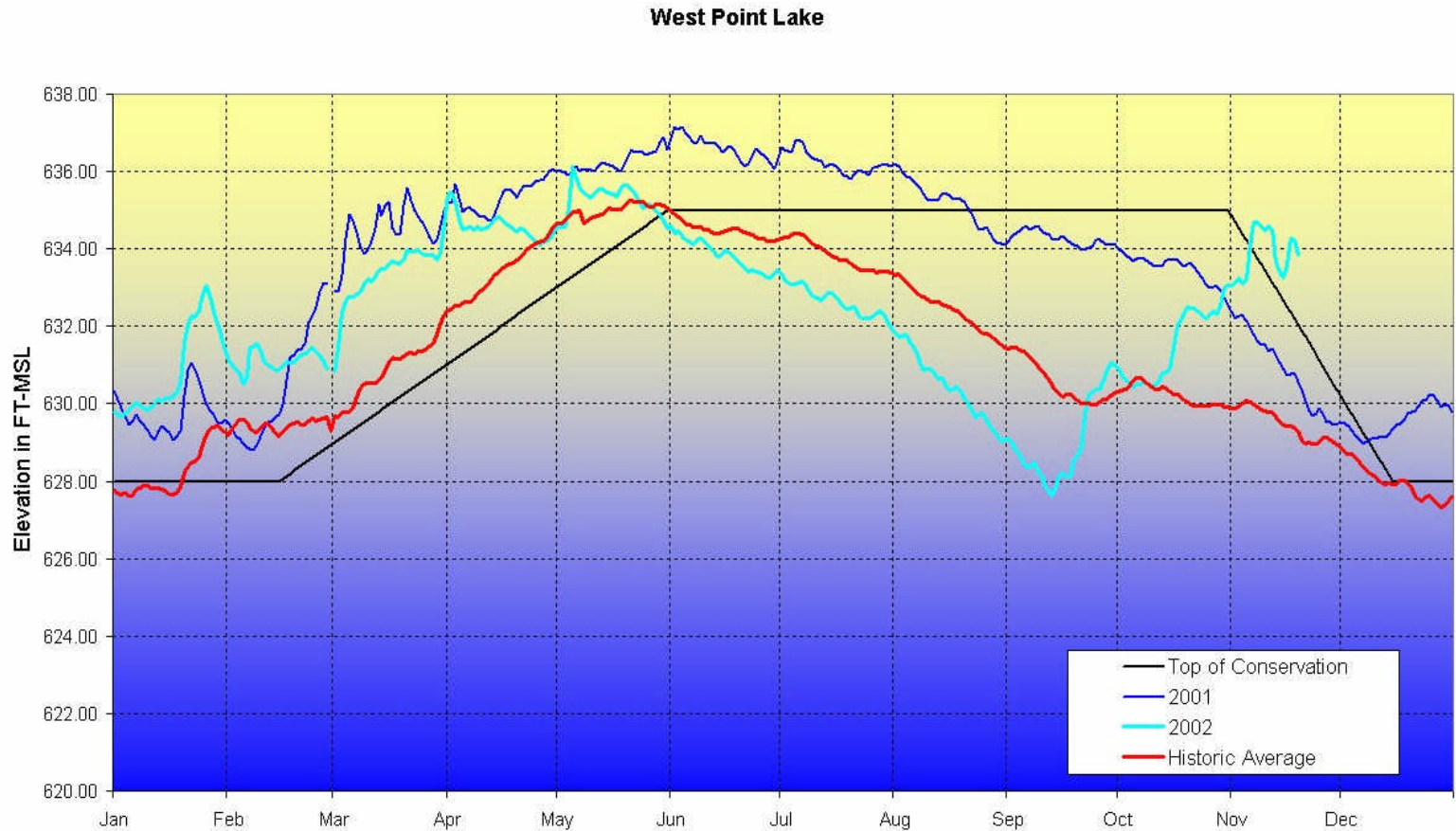


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Lake Lanier Elevations



MOBILE DISTRICT

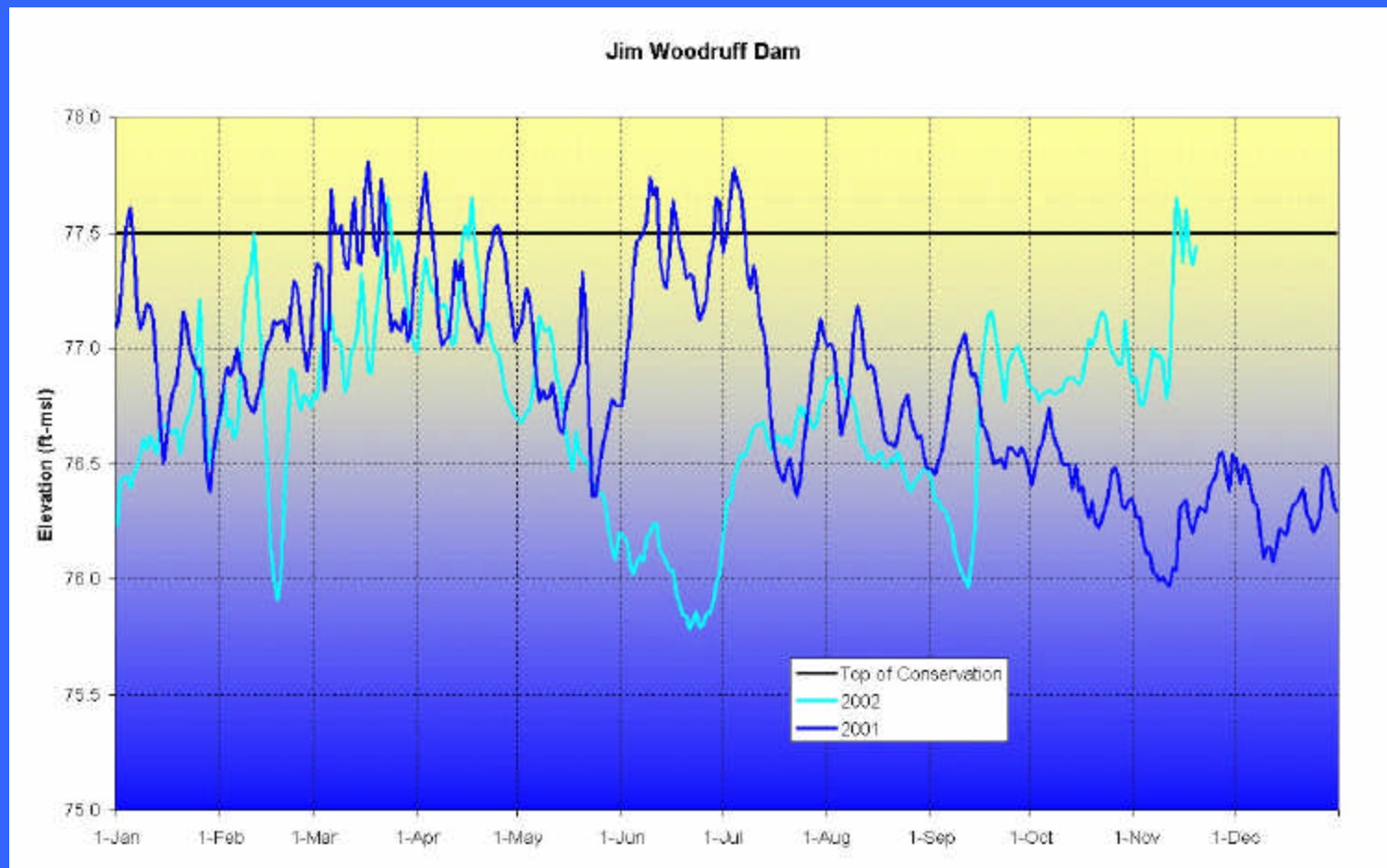


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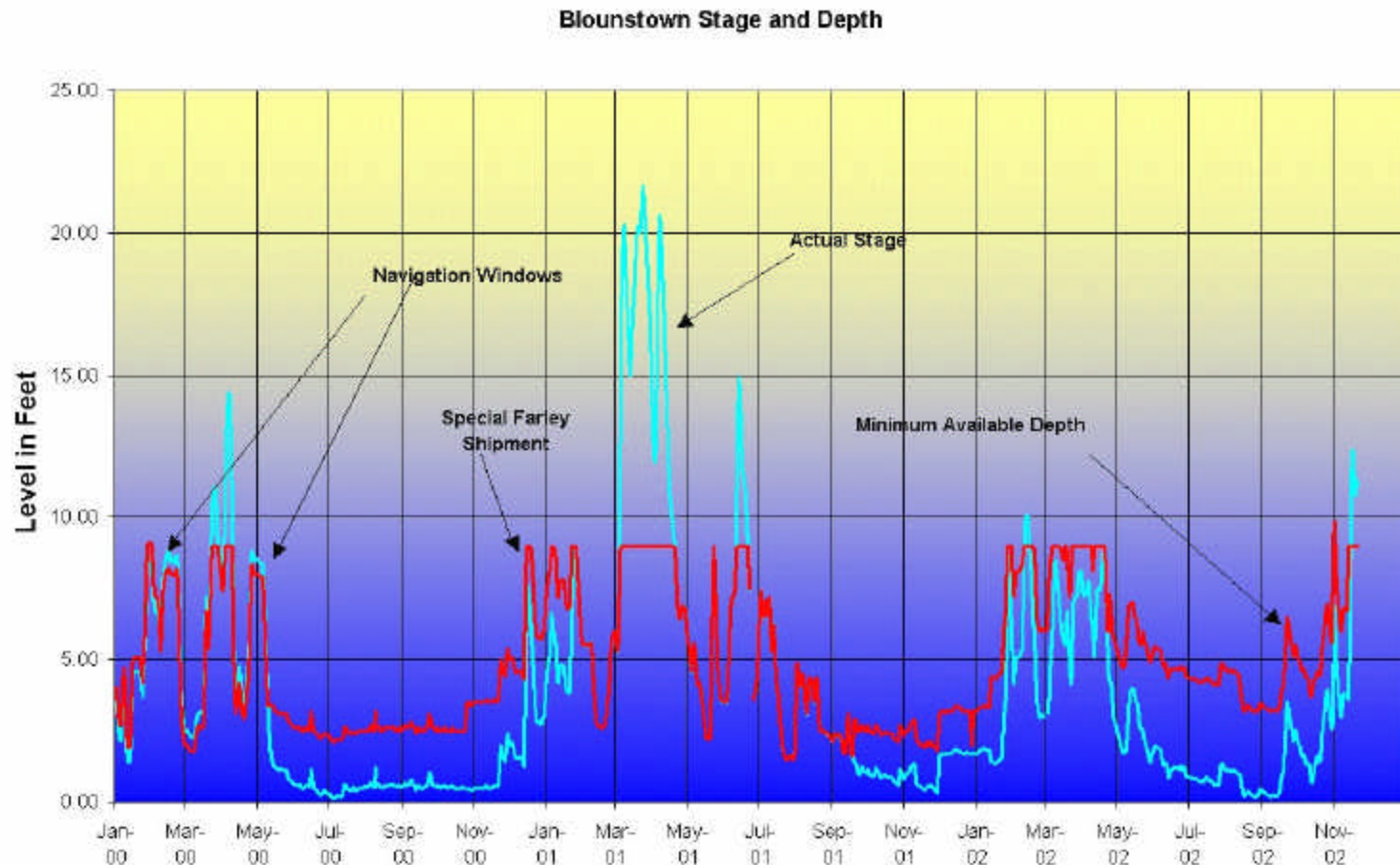
Walter F. George Elevations



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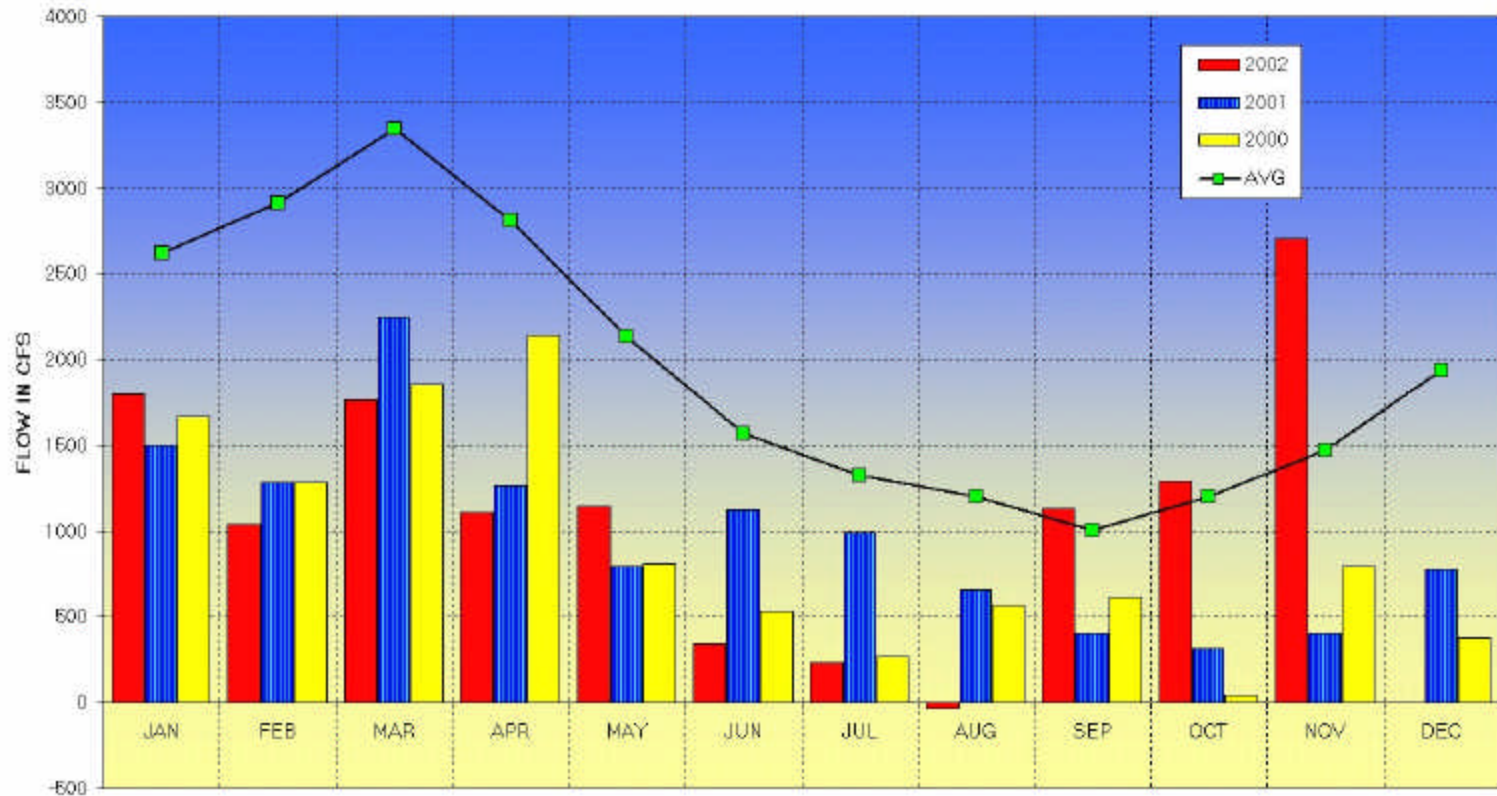


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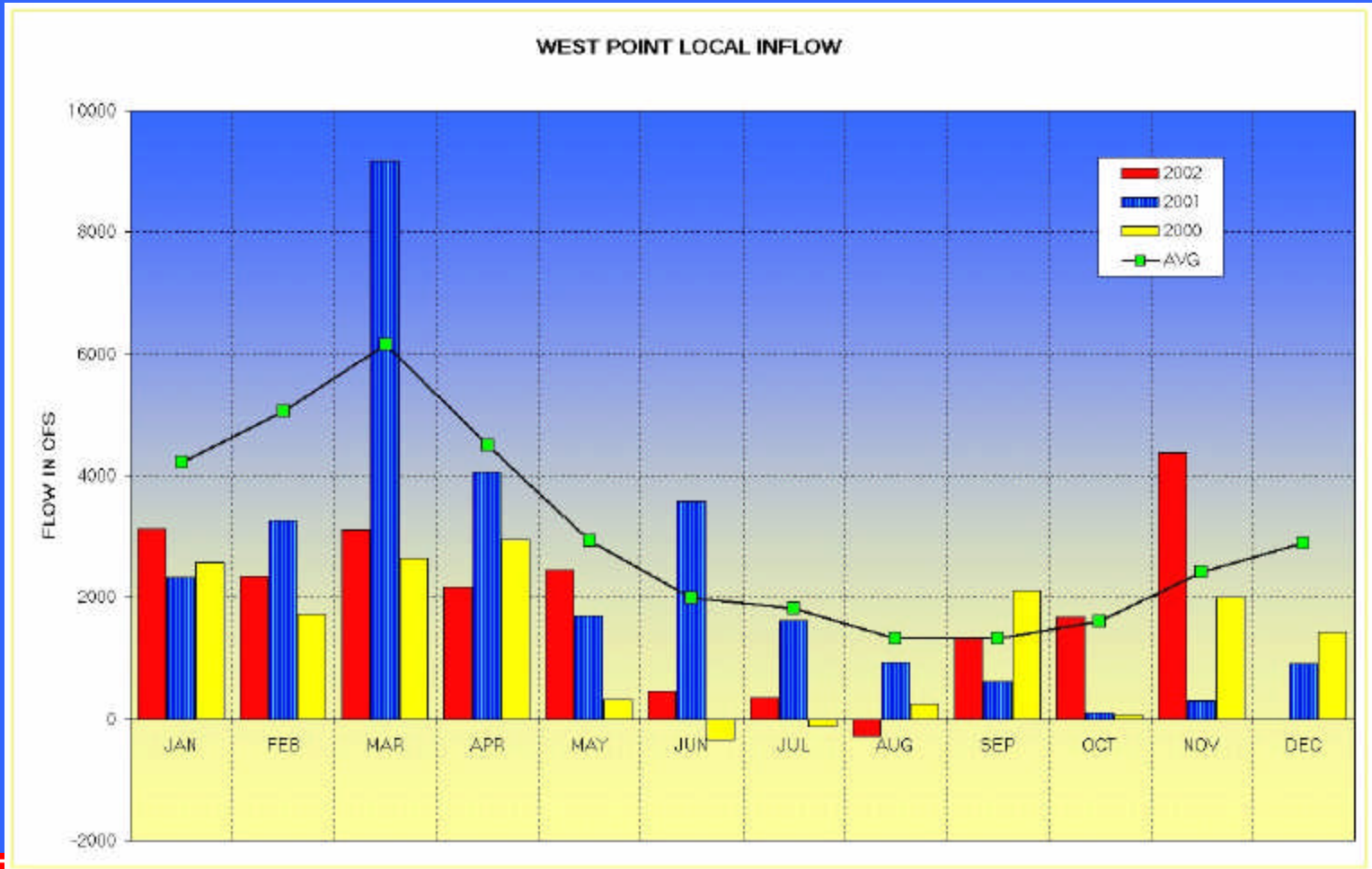


MOBILE DISTRICT

LANIER LOCAL INFLOW

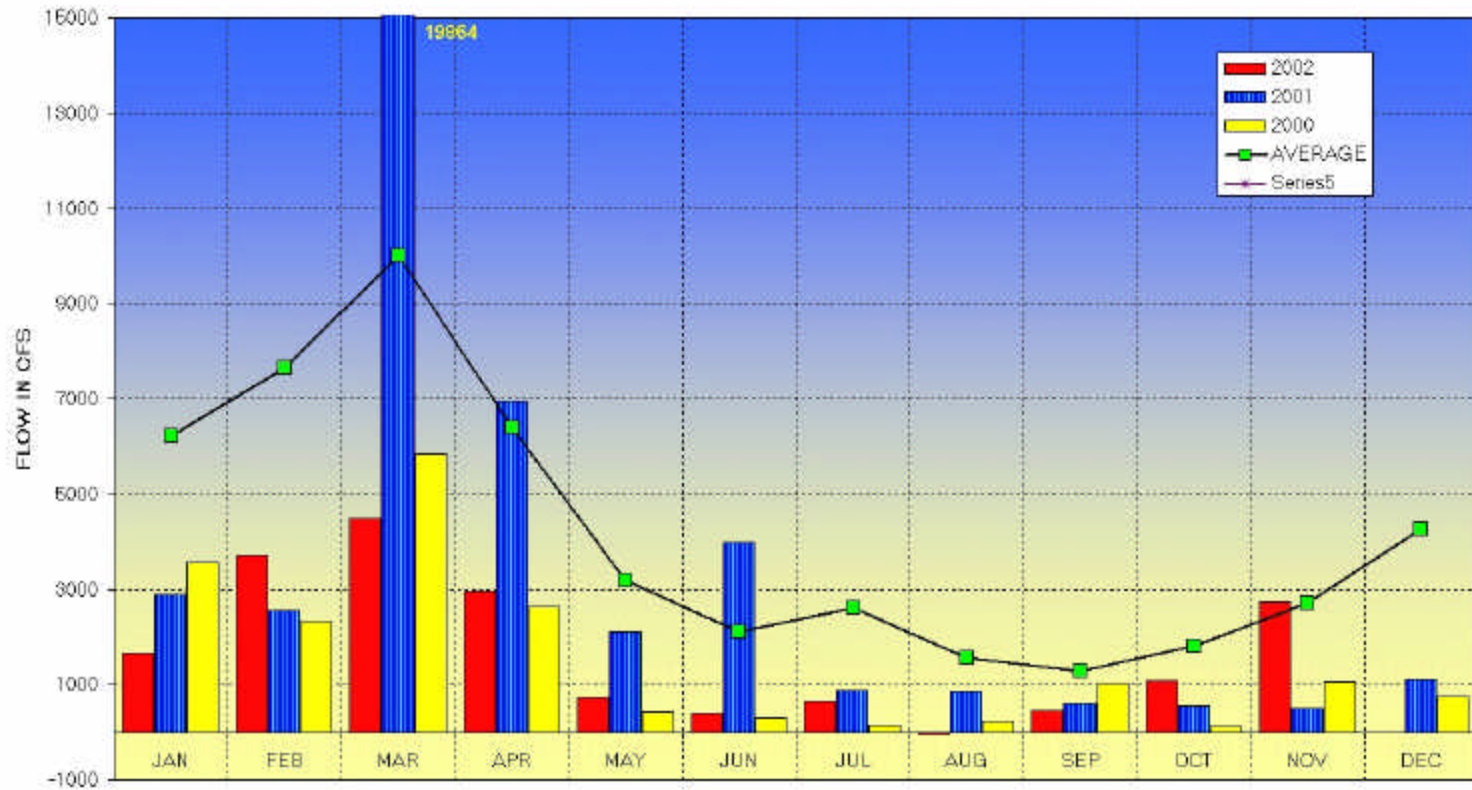


MOBILE DISTRICT



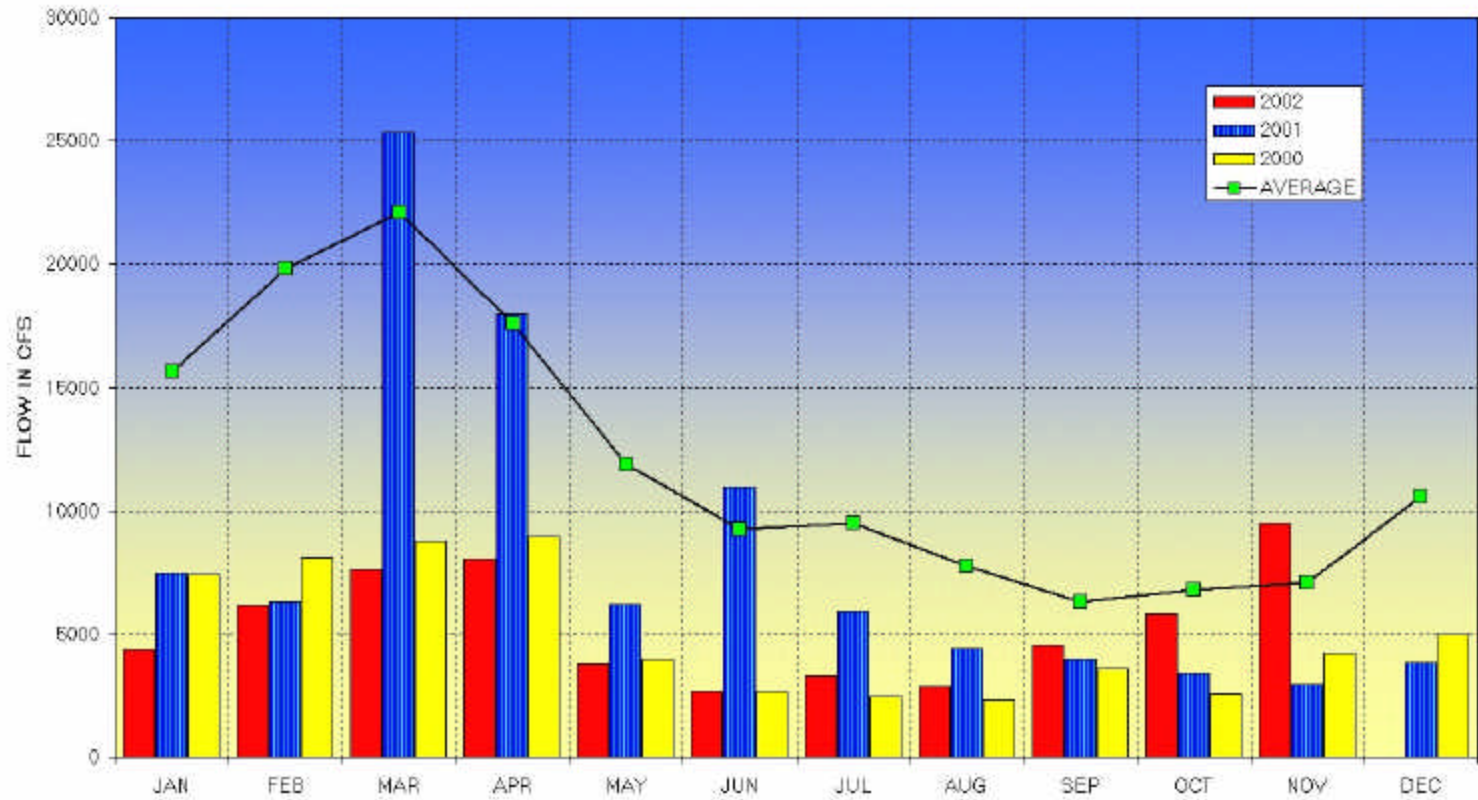
MOBILE DISTRICT

W.F. GEORGE LOCAL INFLOW



MOBILE DISTRICT

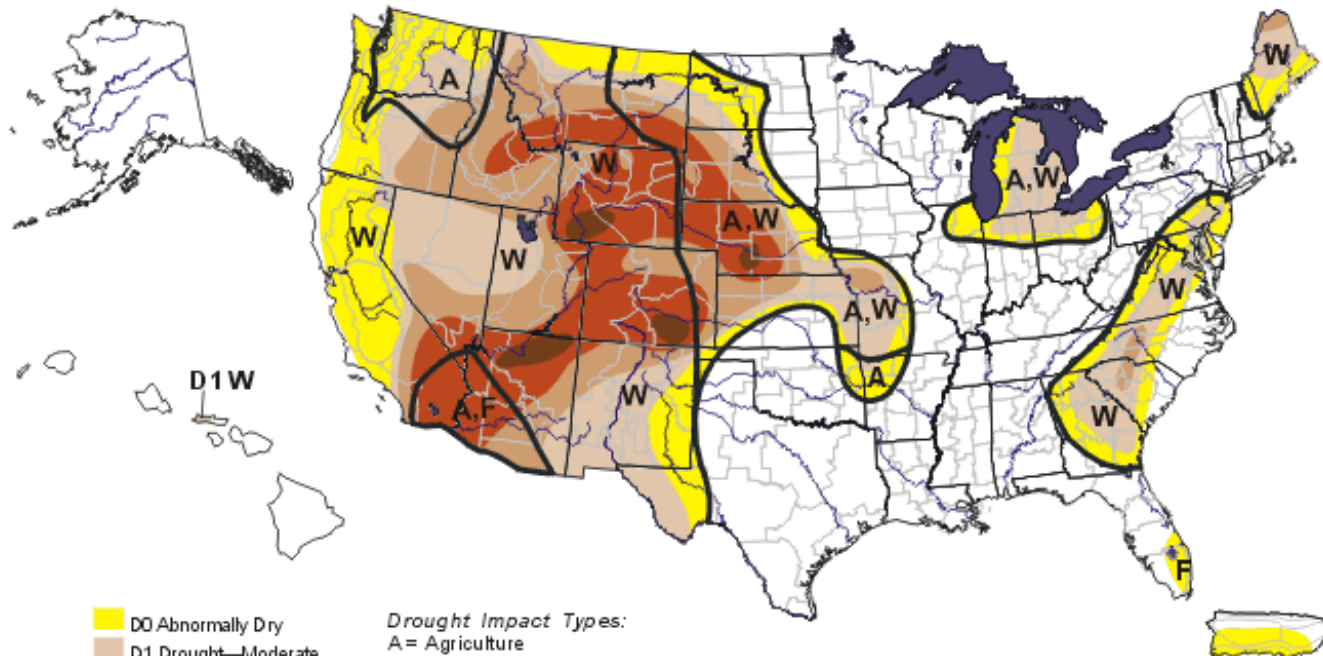
WOODRUFF LOCAL INFLOW








U.S. Drought Monitor

November 12, 2002

Valid 7 a.m. EST



-  D0 Abnormally Dry
-  D1 Drought—Moderate
-  D2 Drought—Severe
-  D3 Drought—Extreme
-  D4 Drought—Exceptional

Drought Impact Types:
A = Agriculture
W = Water (Hydrological)
F = Fire danger (Wildfires)
— Delineates dominant impacts
(No type = All 3 impacts)

The Drought Monitor focuses on broad-scale conditions. Local conditions may vary. See accompanying text summary for forecast statements.

<http://drought.unl.edu/dm>



Released Thursday, November 14, 2002

Author: Mark Svoboda, NDMC

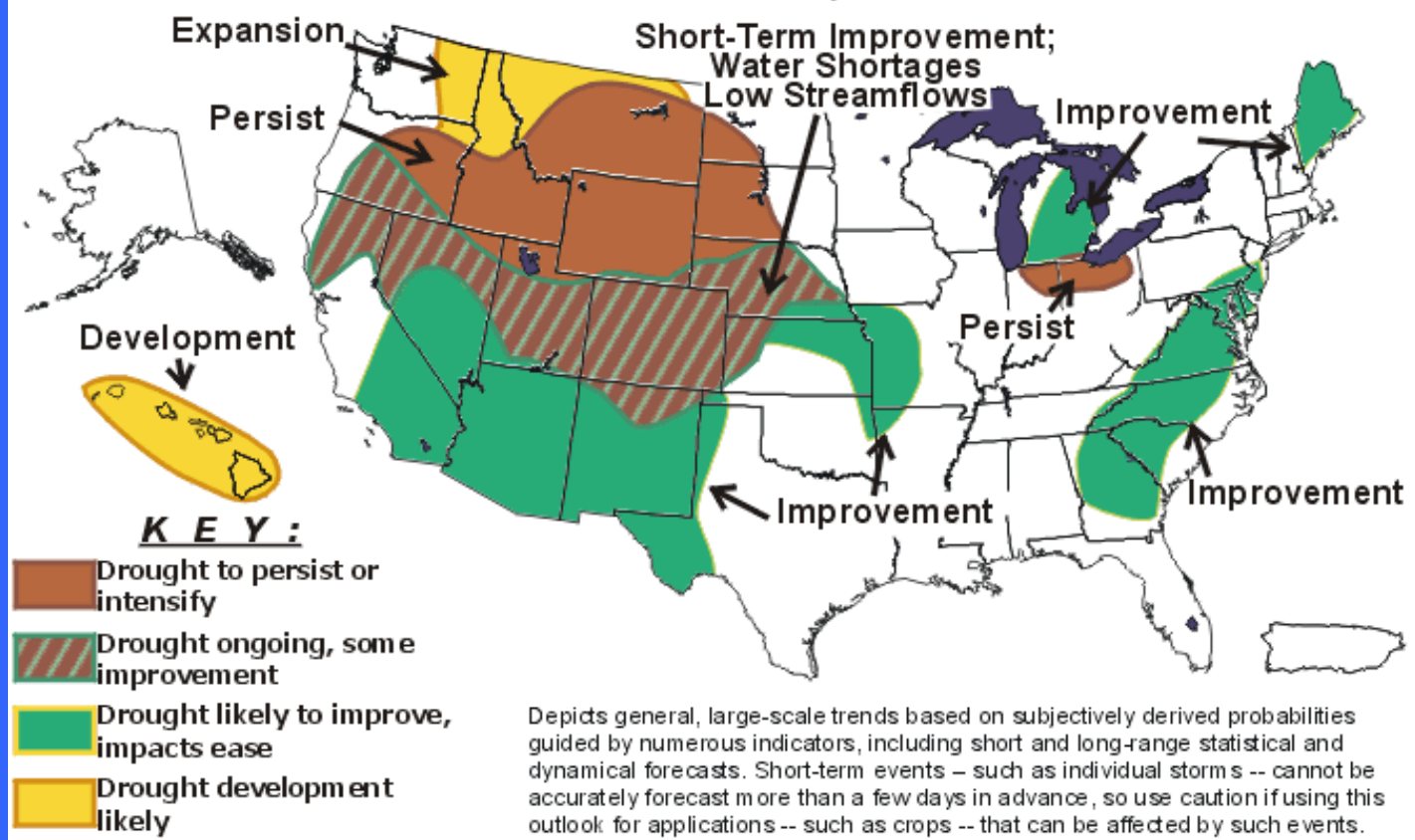




U. S. Seasonal Drought Outlook

Through January 2003

Released October 17, 2002



Depicts general, large-scale trends based on subjectively derived probabilities guided by numerous indicators, including short and long-range statistical and dynamical forecasts. Short-term events -- such as individual storms -- cannot be accurately forecast more than a few days in advance, so use caution if using this outlook for applications -- such as crops -- that can be affected by such events. "Ongoing" drought areas are schematically approximated from the Drought Monitor (D1 to D4). For weekly drought updates, see the latest Drought Monitor map and text.

