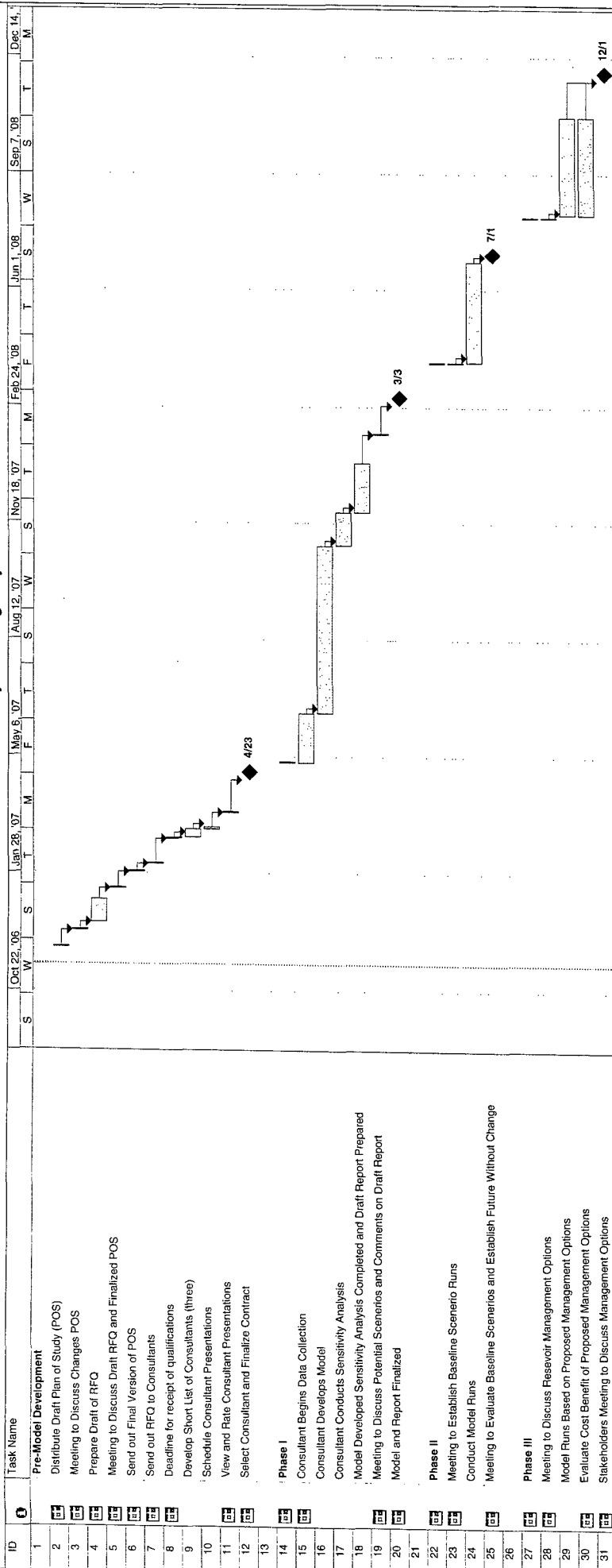


Schedule of Activities For Frenchman Valley Modeling Project



Project: Frenchman Valley Appraisal
 Date: Mon 11/13/06

Task Split

Progress Milestone

Summary Project Summary

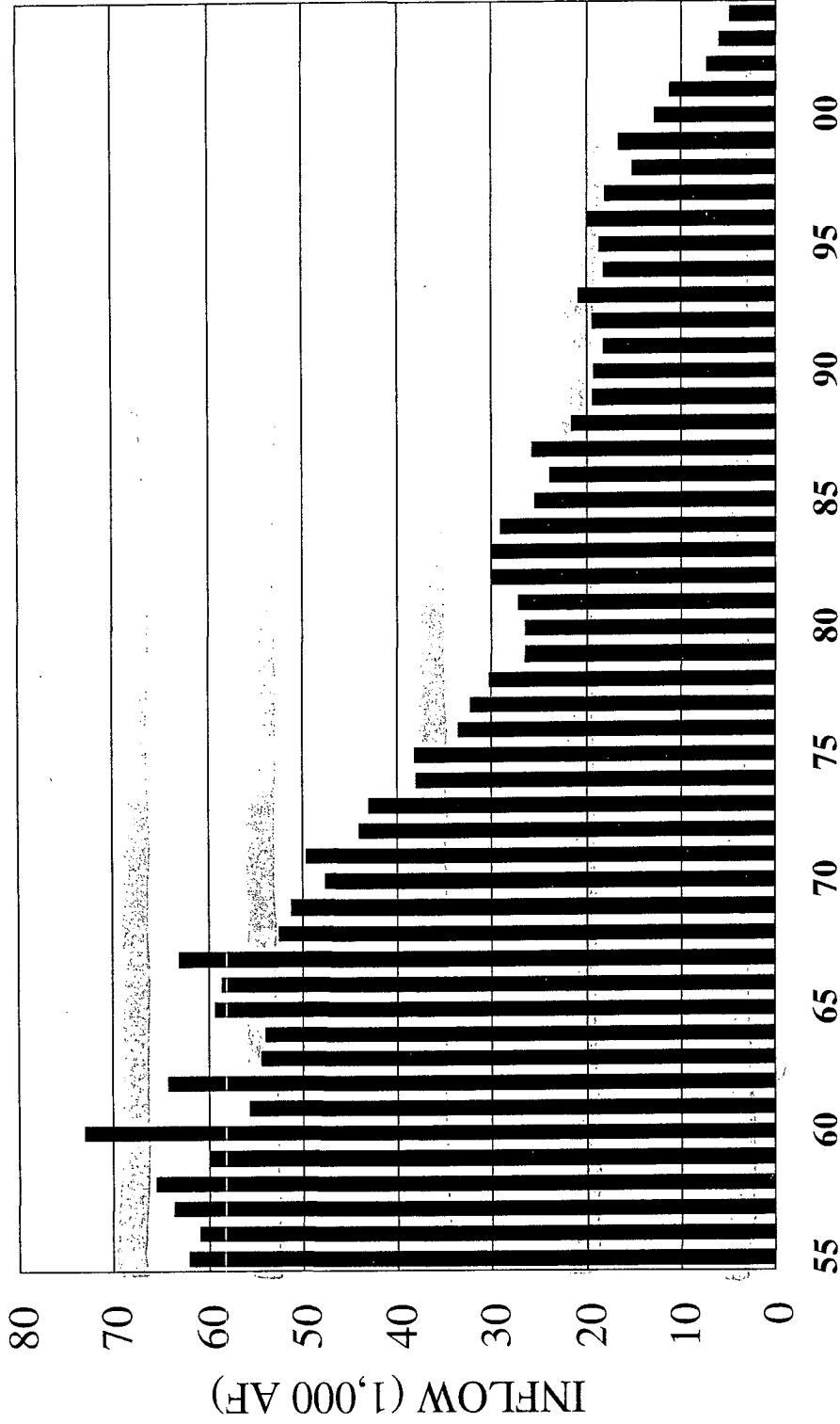
External Tasks External Milestone

Deadline

ENDERS RESERVOIR YEARLY HISTORICAL INFLOW

*What are big boy blue
LWS?*

*WIP'D
PRED*



1955 THROUGH 2004

Input considerations for modeling effort:

URNRD IMP: <http://www.urnrd.org/>

Reduce groundwater pumping by 5% basin wide (1998-2002). Reduction quantities for each NRD will be determined by NDNR. Increase reductions of groundwater pumping in water short years as directed by NDNR.

1998-2002 pumping:

URNRD – 531763

MRNRD – 309479

LRNRD – 242289

1998-2002 depletions (Republican Basin Total)

URNRD – 74161

MRNRD – 52168

LRNRD - 43954

MRNRD IMP: <http://www.mrnrd.org/>

Reduce groundwater pumping by 5% basin wide (1998-2002). Reduction quantities for each NRD will be determined by NDNR. Increase reductions of groundwater pumping in water short years as directed by NDNR.

1998-2002 pumping:

URNRD – 531763

MRNRD – 309479

LRNRD – 242289

1998-2002 depletions (Republican Basin Total)

URNRD – 74161

MRNRD – 52168

LRNRD – 43954

RRWCD <http://www.republicanriver.com/home.asp>, <http://www.water.state.co.us/>

reduce agricultural water use by 5%. Starting by targeting 35000 acre-feet of irrigation water on 30000 irrigated and 5000 non-irrigated acres annually.

Mechanisms for goal achievement will be CRP, CREP and EQIP programs.

CREP: Allocated acres targeted for reduction by county

Kit Carson – 9505 (31.7%), Logan – 293 (1.0%), Phillips – 3870 (12.9%),

Sedgwick – 1314 (4.4%), Yuma – 15018 (50.1%)

EQIP: Two programs; permanent and temporary (14-15 year) retirement. No quantifiable numbers of acres, but budgets show increased emphasis on permanent retirement of acres. Email request in to RRWCD to quantify acreages enrolled in EQIP.

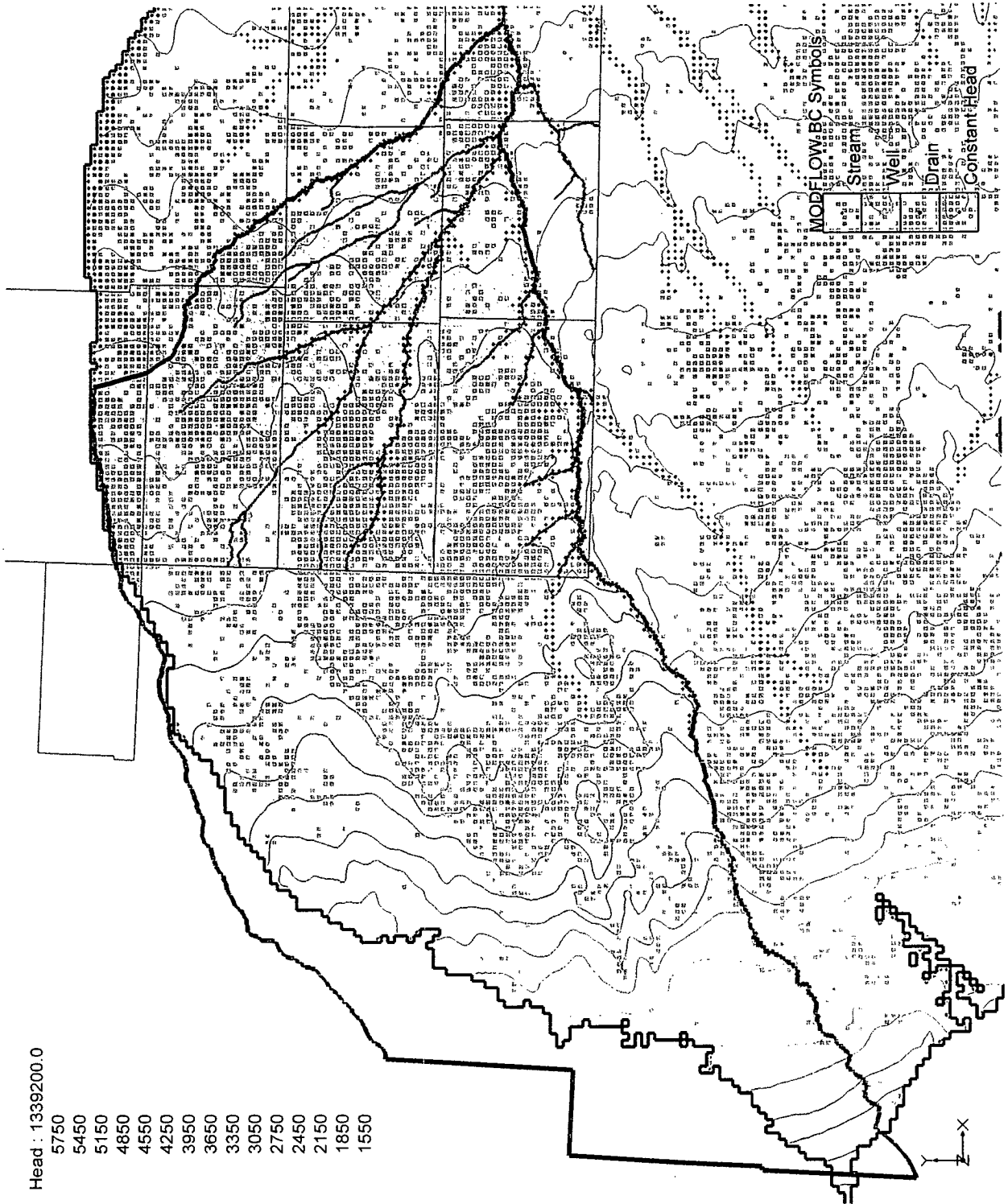
2005-2006 change in funding:

Permanent: 129k -232k (80% increase)

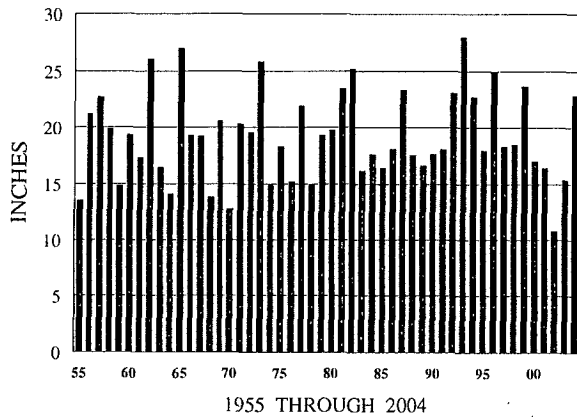
Temporary: 85k-93k (8.2% increase)

Head : 1339200.0

- 5750
- 5450
- 5150
- 4850
- 4550
- 4250
- 3950
- 3650
- 3350
- 3050
- 2750
- 2450
- 2150
- 1850
- 1550

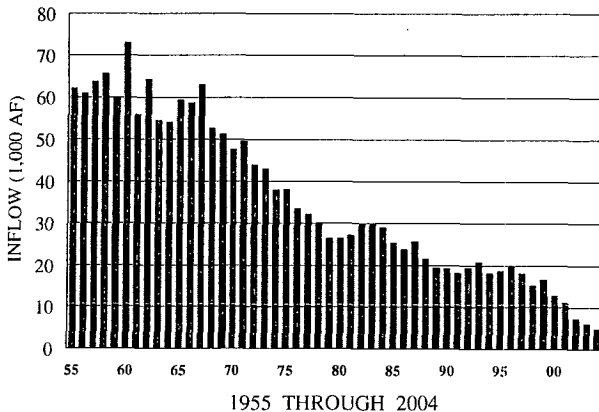


ENDERS DAM
YEARLY PRECIPITATION



*Any upstream
Precip Figures
in Basin?*

ENDERS RESERVOIR
YEARLY HISTORICAL INFLOW



Ground Water

Ground water in the area generally flows eastward, converging toward the Republican River. Irrigation wells are the primary groundwater users, with relatively smaller amounts used for municipal, industrial, domestic, and stock watering purposes. In 1996, a total of 12,246 wells were registered with some of the heaviest concentrations of wells near (within 12 miles of Frenchman Creek above Enders Reservoir, near Beaver and Sappa Creeks (above Harlan County Lake and near the Republican River below Harlan County Lake to Guide Rock.

Irrigation

Enders' reservoir serves the Frenchman Valley Irrigation District (FVID) and the Hitchcock and Red Willow Irrigation District (H & RWID). Approximate acreage served by these districts is as follows: FVID- 9,295 acres, H & RW ID - 11,695 acres (Figure 1). The districts have been unable to deliver appreciable volumes of water since MM/DD/YYYY. ID ELEV, IRR REQ, SEASON: may1-Oct 15

The States agreed to resolve the pending litigation regarding the Republican River Compact by means of a Final Settlement Stipulation and a Proposed Consent Judgment. More efficient management of Republican River can help extend water supplies and meet interstate compact needs as addressed in the Compact Settlement.

Surface Water

The Frenchman-Cambridge Division, a project of the Bureau of Reclamation's Pick Sloan Missouri Basin Project, encompasses the Frenchman-Cambridge, Frenchman Valley, and H&RW Irrigation Districts. Facilities to serve these three irrigation districts include four storage dams and reservoirs, four diversion dams, and the distribution systems to deliver project water for 54,680 acres of irrigable land in Chase, Hitchcock, Hayes, and Red Willow Counties as shown on Exhibit _____. The Frenchman-Cambridge Division contains the Frenchman Unit, the Meeker Driftwood Unit, the Red Willow Unit, and the Cambridge Unit. The Frenchman Unit includes Enders Dam and Reservoir, Culbertson Diversion Dam, Culbertson Canal, Culbertson Extension Canal, and a system of laterals.

The Frenchman-Cambridge Division was authorized for initial construction in Senate Document 191, as approved in the Flood Control Act of 1944. The Frenchman Valley Irrigation District, organized in 1911, was incorporated into the development plan through the purchase of its supply canal in 1956. The H&RW Irrigation District was organized in 1955. The construction of Enders Dam and Reservoir started in January 1947 and was completed in 1951. Storage of water began in October 1950 and the irrigation pool first filled in January 1952. The first irrigation water was delivered to the Frenchman Valley and H&RW Irrigation Districts in May 1958 and April 1961, respectively.

The drainage area above Enders Reservoir is 950 square miles, but the drainage area contributing inflows directly into Enders Reservoir is approximately 790 square miles. A majority of the inflow into Enders Reservoir is derived from groundwater discharge into Frenchman Creek. Enders Reservoir provides off-season storage for the Frenchman Valley and H&RW Irrigation Districts. Water stored in Enders Reservoir, along with flows from the Frenchman and Stinking Water Creeks, provides water for the Culbertson Canal and the Culbertson Extension Canal systems, which serve 9,600 acres in the Frenchman Valley Irrigation District and 11,490 acres in the H&RW Irrigation District. The conservation pool in Enders Reservoir begins at elevation 3082.4 and extends to elevation 3112.3 and totals 34,512 acre-feet (Figure ____).