Basin Management Objective
Butte County
Sub Area – NORTH YUBA
California Water Service Co., Oroville District
Calendar Year -2006

Butte County Water Advisory Committee Member – Tony Carrasco

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Aquifer Systems Identified In Sub Area:
Quaternary Alluvium
Modesto Formation
Riverbank Formation
Laguna formation

Management Objective –

To maintain sufficient volumes of groundwater in storage within all aquifer systems to provide an adequate and affordable domestic water supply of adequate quality for consumption, including periods of extended drought and to assure that groundwater in storage is not depleted over time. It is the intent of this management objective to assure a sustainable domestic water supply now and into the future and to assure the water supply can be utilized without injuring groundwater quality or inducing land subsidence. The management objective is also to assure an adequate supply for groundwater from all aquifer systems for all domestic users in the sub-area.

Location of Basin Management Objective Key Wells:

Groundwater Levels – See attached map of monitoring wells

Groundwater Quality – In 2006 water quality samples were taken as per EPA & DHS guidelines and requirements. No water quality issues or violations were found. Criteria for the BMO process will be determined prior to the submission of the 2007 BMOs.

Land Subsidence – See attached map of monitoring wells

Groundwater Level Monitoring Network(s):

Department of Water Resources & California Water Service Company.

Groundwater Quality Network(s):

In 2006 water quality samples were taken as per EPA & DHS guidelines and requirements. No water quality issues or violations were found. Criteria for the BMO process will be determined prior to the submission of the 2007 BMOs.

Land Subsidence Monitoring Network(s):

None in this sub unit.

Monitoring Frequency:

Groundwater Levels – Conducted monthly by California Water Service Company.

Groundwater Quality – In 2006 water samples are conducted as per EPA & DHS guidelines. No water quality issues or violations.
2007 will be determined later.

Land Subsidence – None in this sub unit.

Well Numbering System(s):

Groundwater Levels – California Water Service Company used an arbitrary number for security reasons for the wells listed in the BMO packet until State Well numbers can be assigned.

Groundwater Quality – In 2006 water samples are conducted as per EPA & DHS guidelines. No water quality issues or violations.
2007 will be determined later.

Land Subsidence – None in this sub unit.

Basin Management Objective Key Wells and Compliance Methodology for Groundwater Levels:

Well ID	Aquifer System	Well Type	Stage 1 & 2Alerts**		Stage 3Alerts**	
			Elev. (ft)	Depth (ft)	Elev. (ft)	Depth (ft)
CWS-01	Laguna formation	Domestic	45.0	95.0	50.0	100.0
CWS-02	Laguna formation	Domestic	40.0	149.0	45.0	154.0
CWS-03	Laguna formation	Domestic	80.0	97.0	85.0	102.0

* - See Staff Report for description of method.
** - See attached hydrographs.

The methodology for establishing the groundwater level Basin Management Objective in the North Yuba Sub Area was to utilize the spring groundwater levels data from the wells identified above. From this data the average spring groundwater level was

calculated. The stage 1 & 2 Alert levels were then established by subtracting 5.0 feet from the average spring groundwater level. The stage 3 Alert was then established by subtracting 10.0 feet from the average spring groundwater level.

Basin Management Objective Key Wells and Compliance Methodology for Groundwater Quality:
In 2006 water quality samples were taken as per EPA & DHS guidelines and requirements. No water quality issues or violations were found. Criteria for the BMO process will be determined prior to the submission of the 2007 BMOs.

Basin Management Objective Key Wells and Compliance Methodology for Land Subsidence:
None in this sub unit.

BMO Alert Stage Definitions:

The North Yuba Sub Area will use the following guidelines in the management of the groundwater resources. The groundwater level and land subsidence management objectives are intended to trigger predetermined voluntary Ground Water Management Actions, as defined below, to remedy declining ground water levels that are not recovering to compliance levels for each index well. The groundwater quality BMO management actions will be defined in 2007.

Groundwater Levels:

Stage 1: The first year that spring groundwater levels fall five feet below the average spring groundwater level established for each respective well.

Stage 2: Stage 2 is reached if spring groundwater levels, for a second consecutive year, remain five feet below the average groundwater level established for each respective well.

Stage 3: Stage 3 is reached if the spring groundwater levels fall ten feet below the average spring groundwater level established for the well.

Groundwater Quality:

In 2006 water quality samples were taken as per EPA & DHS guidelines and requirements. No water quality issues or violations were found. Criteria for the BMO process will be determined prior to the submission of the 2007 BMOs.

Land Subsidence:

No equipment available for measurements in this sub area.

BMO Compliance Evaluation Procedure:

Compliance with the BMO will be determined by the Butte County Water Commission's Technical Advisory Committee following the spring measurement period. The groundwater surface elevation at each monitoring well will be compared against the corresponding compliance graph and stage definition criteria to determine if the groundwater surface elevations are above or below specific alert trigger levels. The Technical Advisory Committee of the Butte County Water Commission will perform this evaluation and report the results of the evaluation to the Butte County Water Advisory Committee and Water Commission.

Ground Water Management Actions:

Stage 1. Groundwater management actions to be undertaken following a Stage 1 noncompliance shall be informational. The Butte County Water Advisory Committee (WAC) and Water Commission (WC) will be advised of the noncompliance.

Stage 2. Groundwater management actions to be undertaken following a Stage 2 noncompliance shall be investigational. Upon identification of the Stage 2 noncompliance, the noncompliance will be reported to the WAC and the WC. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as how to correct the noncompliance. The TAC shall report their findings and recommendations back to the WAC and WC within 30 days.

Stage 3. Groundwater management actions to be undertaken following a Stage 3 noncompliance shall be actionable. Upon identification of the Stage 3 noncompliance, the noncompliance will be reported to the WAC and the WC. Following review and concurrence, the WAC shall direct the TAC to initiate an investigation to determine the cause(s) of the noncompliance and make recommendations as how to correct the noncompliance. The TAC shall report back their findings and recommendations back to the WAC and WC within 30 days. The WAC will then work with the locals in the sub area to implement needed water management activities necessary to correct the problem. Such water management activities shall include, but not be limited to, voluntary water conservation measures, redistribution of groundwater extraction, reduction of groundwater extraction, or other measure(s) identified and approved by the WAC, WC, and the Butte County Board of Supervisors.

Supporting Data:

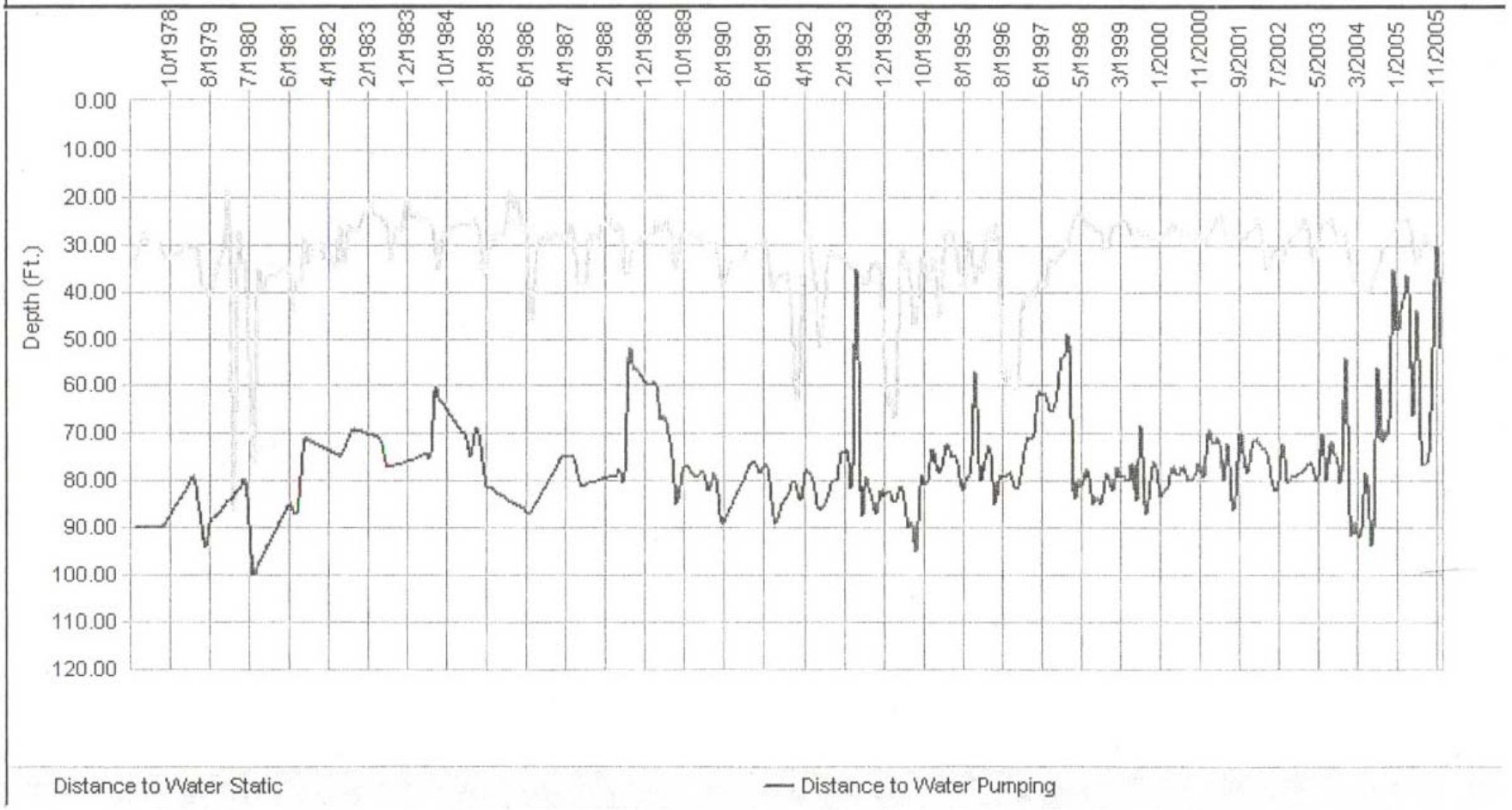
See attached hydrographs
See attached map of existing monitoring wells
See attached map of Sub-Unit Boundaries

Well Level Readings

(Note: Values Are Interpolated)

WATER LEVEL GRAPHIC

District: OROVILLE Station: STA. CWS-01 from the year 1978 to 2005 As Of: 4/12/2006
Critical Pumping Level: 100

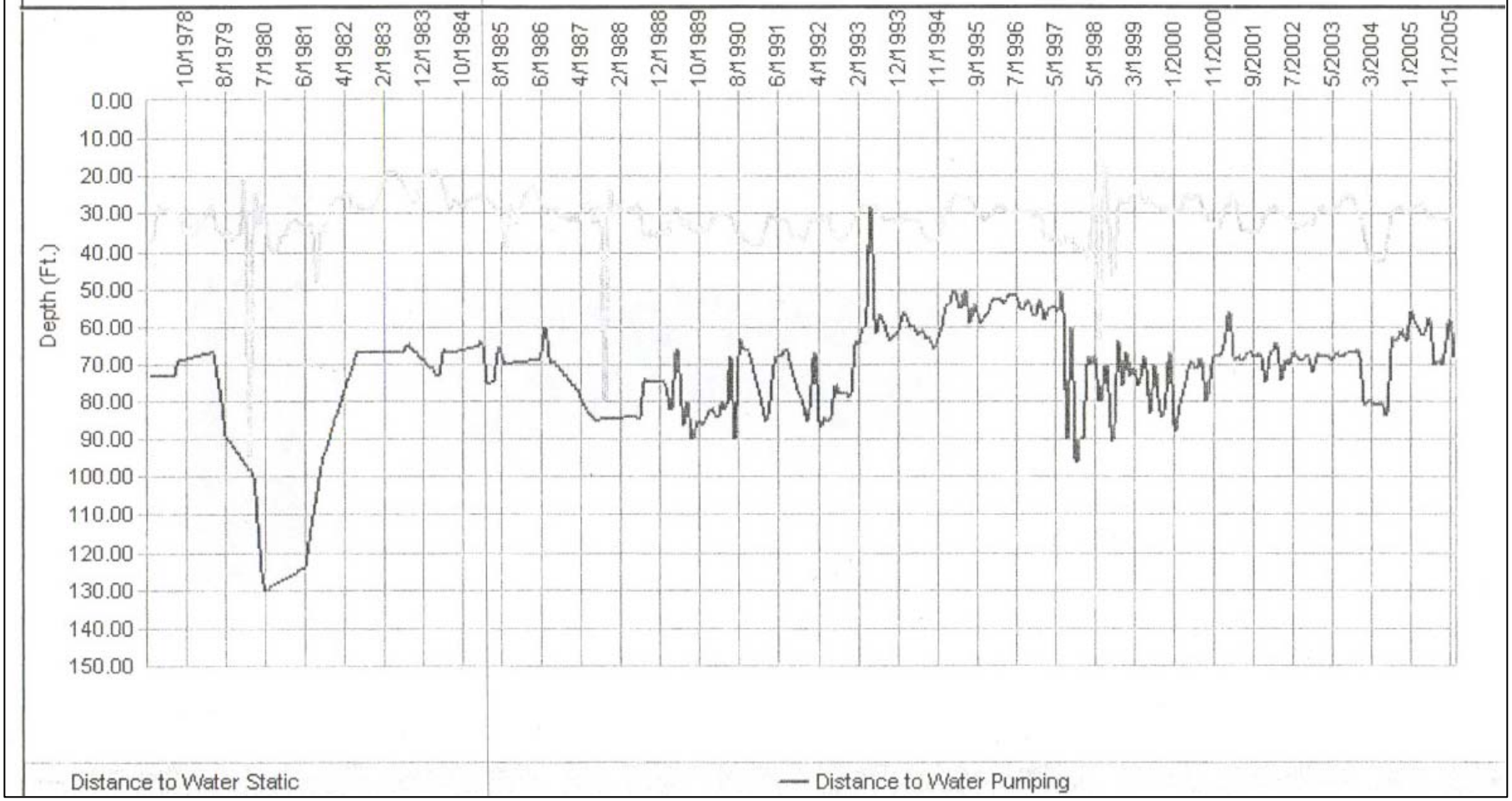


Well Level Readings

(Note: Values Are Interpolated)

WATER LEVEL GRAPHIC

District: OROVILLE Station: STA. CWS-02 from the year 1978 to 2005 As Of: 4/12/2006
Critical Pumping Level: 154



Well Level Readings

(Note: Values Are Interpolated)

WATER LEVEL GRAPHIC

District: OROVILLE Station: STA. CWS-03 from the year 1978 to 2005 As Of: 4/12/2006
Critical Pumping Level: 102