

**BOARD OF SUPERVISORS. GLENN COUNTY. CALIFORNIA ORDINANCE NO. 1115
ORDINANCE AMENDING THE COUNTY CODE, ADDING CHAPTER 20.03,
GROUNDWATER MANAGEMENT.**

THE BOARD OF SUPERVISORS OF THE COUNTY OF GLENN ORDAINS AS FOLLOWS:

Section 1. Chapter 20.03, Groundwater Management, shall be added to read as follows:

20.03.010 Purpose:

- A.** The Board finds that the protection of the groundwater resource for its use within the County is of major concern to the residents of the county for the protection of their health, welfare, and safety. The Board further declares that the beneficial use of groundwater and maintenance of safe yield is of critical importance to the economy of the County.
- B.** To insure the continued availability of groundwater and to ensure that extraction of groundwater does not exceed safe yield.
- C.** To protect groundwater quality and prevent land subsidence.
- D.** The County does not hereby intend to regulate, in any manner, the use of groundwater; unless safe yield is exceeded.
- E.** It is essential for information gathering and management purposes that the County adopt a monitoring program addressing groundwater levels, groundwater quality, and land subsidence.
- F.** In adopting this groundwater management ordinance, the County does not intend to limit other authorized means of managing the County's groundwater, and intends to work cooperatively with interested local agencies to further develop and implement joint groundwater management practices.
- G.** The lack of groundwater management may have the following negative impacts on the groundwater resource, including but not limited to:
- 1.** Lowering of groundwater levels leading to increased energy consumption, the increased cost of deepening existing wells, and the prospect that new wells will need to be deeper and more costly than would otherwise be required.
 - 2.** Damage to public roads, bridges, canals and other structures caused by land subsidence at substantial cost to the public treasury.
 - 3.** Drying up of surface and subsurface flows leading to the potential loss of critical riparian and wetland habitat.
 - 4.** Degradation of groundwater quality.
- H.** It is the purpose and intent of this chapter to establish an effective policy concerning groundwater that will assure that the overall economy and environment of County is protected. The County seeks to foster prudent groundwater management practices to avoid significant adverse environmental, social, and economic impacts.

20.03.020 Definitions:

"Aquifer" means a geologic formation that stores, transmits and yields significant quantities of water to wells and springs.

"Available supply" means the quantity of groundwater, which can be withdrawn annually from a groundwater basin without exceeding safe yield of the basin.

"Board" means the Board of Supervisors of Glenn County

"County" means County of Glenn.

"District" means a district or municipality wholly or in part located within the boundaries of the county, which is a purveyor of waters for agricultural, domestic or municipal use. Orland Unit Water Users and Willow Creek Mutual Water Company are included in this definition.

"Enforcement Agency" means the Board as the Enforcement Agency for general well standards and shall also be the Enforcement Agency under this chapter.

"Export" means the use of County groundwater outside of the boundaries of County and outside of the boundaries of any district that is partially within County. Surface water which is sold, exchanged and replaced by groundwater extraction shall be considered export.

"Extensometer" means an instrument for measuring land subsidence.

"Groundwater" means all water beneath the surface of the earth below the zone of saturation, but does not include water which flows in known and definite subsurface channels.

"Groundwater Management Plan" means a plan prepared pursuant to the California Groundwater Management Act (commencing with Water Code Section 10750 et. seq.).

"Groundwater Substitution Program" means the voluntary substitution of an available surface water supply by a groundwater supply for the purposes of enhancing in-stream flow or export.

"Recharge" means flow to groundwater storage from precipitation, infiltration from streams, irrigation, spreading basins and other sources of water.

"Land Subsidence" means the lowering of the ground surface caused by the inelastic consolidation of clay beds in the aquifer system.

"Technical Advisory Committee" shall include a nine (9) person committee nominated by the Water Advisory Committee and appointed by the Board. The committee shall include representatives of the Glenn County Departments of Public Works and Development Services, the Cooperative Extension, the Environmental Health Office, the Agricultural Commissioner, and a representative from the State Department of Water Resources. The committee shall also include four (4) at-large members to be selected and represent the North, South, Central and East areas of the County and all to be knowledgeable in groundwater management and hydrology.

"Water Advisory Committee" means a twenty-two (22) person advisory body which shall be appointed, with membership serving at the pleasure of the Board, as follows:

1. Stony Creek Water District 1
2. Orland Artois Water District 1
3. Orland Unit Water Users Association 1
4. Reclamation District 1004 1
5. Glide Water District 1
6. Kanawha Water District 1
7. Glenn Colusa Irrigation District 1
8. Provident Irrigation District 1
9. Board of Supervisor Member, ex officio 1
10. City of Willows 1
11. City of Orland 1
12. Princeton-Codora-Glenn Irrigation Dist. 1
13. Western Canal Water District 1
14. Willow Creek Mutual Water Company 1
15. Resource Conservation District 1
16. East Corning Basin Private Pumpers 1
17. BOS District 5 Private Pumpers 1
18. BOS District 3 Private Pumpers 1
19. Reclamation District #2106 1
20. West Colusa Basin Private Pumpers 1
21. West Coming Basin Private Pumpers 1
22. Glenn County Farm Bureau 1

20.03.030 Safe Yield:

A. Safe yield for Glenn County will be determined by the Basin Management Objective (BMO) method. The BMO predefines acceptable levels of the following:

1. Groundwater levels
2. Groundwater quality
3. Land subsidence.

B. Compliance with the BMO will be determined by evaluation of data collected from the groundwater level, groundwater quality and land subsidence monitoring networks. Evaluation of these data shall be the only basis for determining compliance with the BMO. It is the intent that the BMO be chosen so as to assure that the overall economy and environment of County is protected.

20.03.040 Basin Management Objective:

A. Determination of the BMO: The BMO will be established initially, and reestablished annually by the Board, with the recommendation of the Technical Advisory Committee and the Water Advisory Committee based on monitoring data and existing hydrogeologic conditions of the aquifer system. It is the intent that there be one countywide BMO, which will incorporate individual BMO determinations for the County sub-areas shown in [Exhibit A](#).

B. Groundwater management practices based on the established BMO criteria for one area of the county shall not result in exceeding the established BMO criteria in adjacent areas.

20.03.050 Monitoring BMO Compliance:

Monitoring programs designed to detect changes to groundwater levels, groundwater quality and land subsidence will be key to proper assignment of, and compliance with, the BMO. The monitoring programs will measure select wells to determine changes in groundwater levels and changes in groundwater quality, and periodically survey select benchmarks to identify land subsidence. Continuous land subsidence monitoring with extensometers shall also be incorporated into the land subsidence monitoring network.

20.03.060 Monitoring Network:

A. Establishing The Groundwater Level Monitoring Network: The monitoring network will be reviewed by the Technical Advisory Committee, established by the Water Advisory Committee and approved by the Board. The intent of the groundwater level monitoring network is not to measure all wells within the County, but to measure a select group of wells that can adequately identify representative conditions in the aquifer system for determination of compliance with the BMO.

B. The network will include select domestic and irrigation wells from water districts, private owners, and municipal and industrial water suppliers. Where needed, dedicated monitoring wells may be installed and monitored. Participation by private landowners will be on a voluntary basis. A well owner, who is within an irrigation district, shall notify that district prior to participating.

20.03.070 Monitoring Frequency:

Establishing Monitoring Frequency for Groundwater Levels:

The frequency of groundwater level monitoring will be determined by the Water Advisory Committee and approved by the Board. As a minimum, groundwater levels should be monitored three times during the year: one measurement prior to the irrigation season, one measurement during peak groundwater use, and one measurement following the irrigation season (March, July and October).

20.03.080 Water Quality:

A. Establishing the Water Quality Monitoring Network:

The groundwater quality monitoring network will be established by the Water Advisory Committee and approved by the Board. The intent of the groundwater quality-monitoring network is not to monitor all wells in the County, but to monitor a group of wells that can adequately determine representative groundwater quality conditions in the aquifer system for identification of compliance with the BMO. The network will include select domestic and irrigation wells from water districts, private owners, and municipal and industrial water suppliers. Where needed, dedicated monitoring wells will be installed and monitored. Participation by private landowners will be on a voluntary basis.

B. Establishing Monitoring Frequency for Groundwater Quality:

The frequency of water quality monitoring will be determined by the Water Advisory Committee and approved by the Board. As a minimum, groundwater quality should be monitored once a year during the peak groundwater use (July). As a minimum, groundwater quality measurements will monitor temperature and electrical conductivity. If conditions warrant, additional laboratory water quality analysis may be performed.

20.03.090 Land Subsidence:

A. Establishing the Subsidence Monitoring Network: The land subsidence monitoring network will be established by the Water Advisory Committee and approved by the Board. The intent of the land subsidence monitoring is to detect land subsidence for determination of compliance with the BMO. The network will include benchmarks through the County. In heavy groundwater use areas, some existing wells may be converted to extensometers for continuous land subsidence monitoring.

B. Establishing Monitoring Frequency For Land Subsidence: The frequency of land subsidence monitoring will be determined by the Water Advisory Committee and approved by the Board. As a minimum, select benchmarks in the County monitoring network will be resurveyed every five years. These surveys should be conducted following aquifer recovery and prior to groundwater extraction for irrigation in the spring (March). It is anticipated that the benchmarks will be surveyed using precision vertical GPS methods. Extensometer monitoring will be conducted on a continuous basis.

20.03.100 Changes in Monitoring:

A. Changes in Monitoring Frequency: If evaluation of the groundwater level, groundwater quality, or subsidence data indicates a need for fewer or greater monitoring frequency, the Water Advisory Committee may propose a change in the monitoring schedule. The Board will consider changes when supported by credible evidence.

B. Changes in monitoring network: If evaluation of the groundwater level, groundwater quality, or subsidence data indicates a need for a fewer or a greater number of monitoring wells or benchmarks, the Technical Advisory committee can propose a change in the monitoring networks. The Board will consider changes when supported by credible evidence.

20.03.110 Review of Technical Data:

A. The Water Advisory Committee will establish standard methods for review and analysis of the collected data. The Water Advisory Committee may meet bimonthly during the irrigation season (April through September) and quarterly during the off season (October through March) or as necessary.

B. During the irrigation season, the Water Advisory Committee meetings will focus on data review and analysis with respect to compliance with the current BMO. During the non-irrigation season, the Water Advisory Committee meetings will focus on a review of BMO compliance for the previous irrigation season and development of new BMO criteria for the following year.

C. The Water Advisory Committee will establish methods for data collection, storage and dissemination. Methods for collecting groundwater level, groundwater quality, and land subsidence data will follow quality assurance and quality control guidelines established by the Water Advisory Committee.

D. The Water Advisory Committee will disseminate the monitoring data through public presentations and through an Internet access via a County maintained groundwater homepage. At a minimum, members of the Water Advisory Committee shall publicly present findings from the monitoring program on a semiannual basis to the Board of Supervisors.

E. The Water Advisory Committee shall collect the following data from any district (and) or person engaged in a groundwater substitution program or groundwater export program: the weekly amounts of groundwater extracted from each well, the precise location of the wells, all pumping and non-pumping groundwater level measurements made during the groundwater substitution period, the time periods

during which the groundwater substitution program will occur, and all required environmental documentation. It shall be the responsibility of the district and (or) person involved in the groundwater substitution program to provide this information to the Water Advisory Committee including any monetary costs of providing such data.

20.03.120 Action by Technical Advisory Committee:

In the event that the Technical Advisory Committee identifies an area of noncompliance with the BMO, the Technical Advisory committee shall report to the Water Advisory Committee on the regional extent and magnitude of the noncompliance. This information shall also be released to the public. This report shall be made in a timely manner not to exceed five (5) days from the time at which BMO noncompliance was identified. The Technical Advisory Committee then shall collect all available pertinent hydrologic data and investigate possible causes for the BMO noncompliance, and recommend actions to resolve the BMO noncompliance to the Water Advisory Committee. These recommendations shall be made in a timely manner not to exceed five (5) days. It shall be the intent of the Technical Advisory Committee to first make recommendations that focus on resolving the BMO noncompliance through negotiations with all parties in the effected area.

20.03.130 Action by Water Advisory Committee:

If negotiations with parties in the effected area do not result in a timely and positive action to reestablish BMO compliance, the Water Advisory Committee may recommend a plan to the Board to modify, reduce or terminate groundwater extraction in the affected area for the remainder of that irrigation season. This action will only be taken on the recommendation of the Technical Advisory Committee after a thorough technical review of the issue. The general sequence of modification, reduction, or termination of groundwater extraction in the affected area, shall be as follows:

- Wells involved in exports
- All other wells

Domestic wells shall not be considered for any modification, reductions, or termination of groundwater extraction.

20.03.140 Action by Board of Supervisors:

The Board of Supervisors shall act as the Enforcement Agency for this ordinance. Any recommendation of the Water Advisory Committee may be appealed to the Board.

20.03.150 Programs by Water or Irrigation Districts:

Districts may operate their own groundwater management programs and make annual reports to the Water Advisory Committee if such programs are based upon safe yield.

Section 2. All ordinances or parts of ordinances in conflict herewith are hereby repealed to the extent of such conflict and no further.

Section 3. The Board of Supervisors finds and determines that substantial evidence does not exist that the action taken hereunder will or may cause a significant effect on the environment.

Section 4. This ordinance shall take effect on and after 30 days after its passage, and before the

expiration of 15 days after its passage a summary of the ordinance shall be published once in a newspaper of general circulation on the County of Glenn.

This ordinance was passed by the Board of Supervisors by the following vote on February 15, 2000.

AYES: Supervisors Bungarz, Hansen, Harris, Mudd and Freeman (Chairman)

NOES: None

ABSENT OR ABSTAIN: None

s/Gary Freeman

CHAIRMAN,
Board of Supervisors
Glenn County California

ATTEST:

s/Vince Minto

VINCE MINTO, COUNTY CLERK, RECORDER,
and ex officio Clerk, Board of Supervisors,
Glenn County, California

APPROVED AS TO FORM:

s/Norman Y. Herring

NORMAN Y. HERRING, COUNTY COUNSEL,
Glenn County, California