

**Appendix B**  
**Butte County Code Chapter 33A -**  
**Groundwater Management (BMO**  
**Ordinance)**

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3 AN ORDINANCE AMENDING THE BUTTE COUNTY CODE TO ADD CHAPTER 33A,  
4 ENTITLED "GROUNDWATER MANAGEMENT."

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6 The Board of Supervisors of the County of Butte ordains as  
7 follows:

8 Section 1. Chapter 33A is added to the Butte County Code to read as  
9 follows:

10 **"33A-1 Legislative Intent**

11 a. The Board finds that the protection of the  
12 groundwater resource for beneficial use within the County  
13 is of major concern to the residents of the county for the  
14 protection of their health, welfare, and safety. The Board  
15 further declares that the beneficial use and maintenance of  
16 groundwater and protection of recharge zones is of critical  
17 importance to the economy and environment of the County.

18 b. The Board intends to ensure the continued  
19 sustainability of groundwater quantity and quality within  
20 the county.

21 c. The Board intends to protect groundwater quality  
22 and prevent land subsidence.

23 d. The Board does not hereby intend to regulate,  
24 outside of Chapter 33, the use of groundwater; unless  
25 established Basin Management Objectives are exceeded.  
26 Absent emergency circumstances, as determined by the Board  
27 of Supervisors, the Board shall not consider changing any

1 established Basin Management Objective until one year has  
2 elapsed from the date of the establishment or Board  
3 approved change to such Basin Management Objective.

4 e. It is essential for information gathering and  
5 management purposes that the County maintain a monitoring  
6 program addressing groundwater elevations, groundwater  
7 quality, and land subsidence.

8 f. In adopting this groundwater management  
9 ordinance, the Board does not intend to limit other means  
10 of managing groundwater within the county authorized  
11 elsewhere in statute or ordinance, and intends to work  
12 cooperatively with local entities and the general public to  
13 further develop and implement joint groundwater management  
14 practices.

15 g. The lack of groundwater management may have the  
16 following negative impacts, including, but not limited to:

17 1. Lowering of groundwater levels leading to  
18 increased energy consumption, a potential decrease in  
19 stream flows, the increased cost of deepening existing  
20 wells, and the prospect that new wells shall need to be  
21 deeper and more costly than would otherwise be required.

22 2. Damage to public roads, bridges,  
23 subterranean infrastructure, canals and other structures  
24 caused by land subsidence at substantial cost to the  
25 public.

26 3. Depleting surface and subsurface flows  
27 leading to the potential loss of wildlife, and critical  
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1 terrestrial and wetland habitat.

2 4. Degradation of groundwater quality.

3 5. A degradation of property values and injury  
4 to agricultural lands in Butte County.

5 h. It is the purpose and intent of this chapter to  
6 establish an effective policy concerning groundwater that  
7 will assure that the overall economy and environment of the  
8 county is protected. Through the adoption of this  
9 Chapter, the Board of Supervisors seeks to protect the  
10 health, safety and welfare of County residents and the  
11 general public.

12 i. The Board does not intend, in adopting this  
13 chapter, to determine whether any groundwater in storage  
14 above established Basin Management Objectives is surplus  
15 groundwater, to define surplus groundwater, or to impose  
16 fees, assessments, charges or taxes upon County residents  
17 and/or business owners.

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19 **33A-2 Definitions.**

20 a. "Aquifer" means a geologic formation that may  
21 store, transmit and yield significant quantities of  
22 groundwater to wells and springs.

23 b. "Basin Management Objectives (BMO)" means  
24 groundwater elevations; groundwater quality, and land  
25 subsidence criteria adopted by the Board of Supervisors for  
26 the management of the Butte County groundwater resource  
27 under the provisions of this chapter.

1 c. "Board" means the Board of Supervisors of Butte  
2 County.

3 d. "Commission" means the Butte County Water  
4 Commission.

5 e. "County" means County of Butte.

6 f. "District" means any purveyor of water wholly or  
7 partly within the boundaries of the county that provides  
8 water for agricultural, domestic, municipal, or industrial  
9 use.

10 g. "Department" means the Butte County Department of  
11 Water and Resource Conservation.

12 h. "Extensometer" means an instrument for measuring  
13 land subsidence.

14 i. "Groundwater" means all water beneath the surface  
15 of the earth below the zone of saturation, but does not  
16 include water which flows in known and definite subsurface  
17 channels, as set forth in the case of *Los Angeles v.*  
18 *Pomeroy* (1899) 124 Cal. 597.

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

22 k. "Land Subsidence" means the permanent lowering of  
23 the ground surface caused by the inelastic consolidation of  
24 clay beds in the aquifer system.

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

1 m. "Technical Advisory Committee" means the seven  
2 (7) person committee nominated by the Water Commission and  
3 appointed by the Board as defined under Chapter 33.

4 n. "Water Advisory Committee" (WAC) means an  
5 advisory body appointed by the Board.  
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7 **33A-3 Actions.**

8 a. Upon approval by the Board, Basin Management  
9 Objectives shall be used to establish criteria for:

- 10 1. Groundwater elevations
- 11 2. Groundwater quality
- 12 3. Land subsidence

13 b. Compliance with the BMO shall be determined by  
14 evaluation of data collected from the groundwater level,  
15 groundwater quality and land subsidence monitoring networks  
16 established within each sub-inventory unit by the local  
17 stakeholders. Evaluation of these data shall be the only  
18 basis for determining compliance with the BMO. It is the  
19 intent that the BMO levels be chosen to assure that the  
20 overall economy and environment of each sub-inventory unit  
21 within County is protected.  
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23 **33A-4 Water Advisory Committee.**

24 a. The Water Advisory Committee (WAC) shall be  
25 appointed by the Board. The WAC shall be an advisory  
26 committee comprised of area-specific members, with one  
27 member appointed from each defined sub-inventory unit  
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1 within the Sacramento Valley Groundwater Basin portion of  
2 the county, and one each from the Foothill and Mountain  
3 inventory units, as defined in the 2001 Butte County Water  
4 Inventory/Analysis report. Additional at-large members  
5 shall be appointed; one from each incorporated municipality  
6 in the County: Chico, Oroville, Paradise, Gridley and  
7 Biggs; one from the agricultural community, one from the  
8 environmental community and one from each organized  
9 watershed group in the county. The operation of the  
10 Water Advisory Committee shall be governed by bylaws  
11 approved by the Board of Supervisors.

12 b. Sub-inventory Units.

- 13 1. Vina
- 14 2. M & T
- 15 3. Llano Seco
- 16 4. Durham/Dayton
- 17 5. Western Canal
- 18 6. Pentz
- 19 7. Esquon
- 20 8. Cherokee
- 21 9. Richvale
- 22 10. Thermalito
- 23 11. Biggs-West Gridley
- 24 12. Butte Sink
- 25 13. Butte
- 26 14. North Yuba
- 27 15. Angel Slough

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16. Chico Urban Area

c. The local representatives of each sub-inventory unit shall be solely responsible for the development of the Basin Management Objective for their sub-inventory unit.

d. Sub-inventory units may be added, modified, or changed as deemed necessary by the stakeholders within the sub-inventory unit. All modifications and changes shall be reviewed by the WAC and approved by the Board.

**33A-5 Appointments.**

a. The Board shall consider all nominations for appointment to the Water Advisory Committee that meet the following criteria:

1. Candidates who reside, own property or have their principle place of business within the sub-inventory unit or entity which they would represent and are willing to serve in a voluntary capacity; and

2. Candidates nominated by the citizens of the Sub Inventory Unit.

b. Members of the WAC shall serve a four-year term. Terms shall be staggered by lot for two (2) years at the onset and open to reappointment for consecutive terms.

**33A-6 Basin Management Objectives.**

a. Determination of the BMO: The process instituting the BMO within each sub-inventory unit shall be established within one (1) year following approval of this ordinance



1 and incorporated into this ordinance by reference. The  
2 individual sub-inventory unit BMO shall be initially  
3 established, and re-established annually through input from  
4 the sub-inventory unit stakeholders. The individual BMO  
5 shall be approved by the Board at the first regular meeting  
6 of the Board in April of each year. The Board's approval  
7 of the BMO shall be based on:

- 8 1. Local sub-inventory unit stakeholder input; and
- 9 2. The recommendation of the Water Advisory  
10 Committee and the Water Commission and
- 11 3. Monitoring data and existing conditions of  
12 the aquifer system.

13 b. It is the intent of this chapter that there be  
14 one countywide adaptive management plan, incorporating all  
15 specific BMO determinations for the individual sub-  
16 inventory units.

17 c. It is the intent of the Board in adopting this  
18 chapter that groundwater management practices based on the  
19 established BMO criteria for one sub-inventory unit shall  
20 not result in exceeding the established BMO criteria in any  
21 other sub-inventory unit.

22 d. In the event that sub-inventory unit stakeholders  
23 do not initially establish or reestablish BMO criteria for  
24 their sub-inventory unit, the Water Advisory Committee  
25 shall establish BMO criteria for that sub-inventory unit  
26 and submit it to the Water Commission and the Board of  
27 Supervisors for approval.

1 **33A-7 Monitoring BMO Compliance.**

2 a. Monitoring programs designed to detect changes to  
3 groundwater elevations, groundwater quality and land  
4 subsidence are the key to proper assignment of, and  
5 compliance with, the BMO. The monitoring programs shall  
6 measure select wells, identified by the local sub-inventory  
7 unit stakeholders, to determine changes in groundwater  
8 elevation and changes in groundwater quality, and land  
9 subsidence. The County shall make available all  
10 groundwater monitoring data through the Department website  
11 in a timely manner.

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13 **33A-8 Monitoring Networks.**

14 a. The monitoring networks used in the development of,  
15 and compliance with, the BMO may include as many of the  
16 following as are feasible: selected domestic and  
17 irrigation wells from water districts, private owners,  
18 municipal and industrial water suppliers and dedicated  
19 monitoring wells. Individual sub-inventory unit  
20 stakeholders may monitor additional wells for compliance  
21 with the BMO. Participation in monitoring activities by  
22 private landowners shall be on a voluntary basis.

23 b. Additional monitoring wells may be installed and  
24 monitored by the local stakeholders for BMO compliance.

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1 **33A-9 Monitoring Frequency.**

2 a. Monitoring Frequency for Groundwater Elevations.

3 At a minimum, groundwater elevations shall be monitored  
4 four times during the year; one measurement prior to the  
5 irrigation season in March, two measurements during peak  
6 groundwater use in July and August, and one measurement  
7 following the irrigation season in October. All monitoring  
8 data collected by stakeholders shall be submitted to the  
9 Department within thirty (30) days of collection.

10 1. Monitoring Frequency for Groundwater  
11 Quality: The frequency of groundwater quality monitoring  
12 shall be at a minimum of once a year during peak  
13 groundwater use (July or August). The following minimum  
14 groundwater quality measurements shall be taken:

- 15 i. Groundwater temperature
- 16 ii. Groundwater pH
- 17 iii. Groundwater electrical conductivity

18 2. Within each sub-inventory unit, increased  
19 frequency and location of groundwater quality monitoring  
20 and monitoring constituents may be determined and conducted  
21 by the local stakeholders. All monitoring data collected  
22 by stakeholders shall be submitted to the Department within  
23 thirty (30) days of collection.

24 b. Monitoring Frequency for Land Subsidence.

25 Land subsidence monitoring shall be conducted on a  
26 continuous basis through the use of extensometers. Land  
27 Subsidence may also be monitored by resurveying existing

1 benchmarks in the sub-inventory unit area at a frequency  
2 determined by the local stakeholders. All monitoring  
3 data collected by stakeholders shall be submitted to the  
4 Department within thirty (30) days of collection.  
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6 **33A-10. Changes in Monitoring.**

7 a. Changes in Monitoring Frequency.

8 If evaluation of the groundwater elevation, groundwater  
9 quality, or land subsidence data indicate a need for  
10 greater monitoring frequency, the local stakeholders may  
11 make changes to the monitoring schedule once per calendar  
12 year. Such changes, if made, shall be submitted to the  
13 Department by April 1 of each year.

14 b. Changes in Monitoring Network.

15 If evaluation of the groundwater elevation, groundwater  
16 quality standards, or land subsidence criteria data  
17 indicates a need for a greater number of monitoring wells  
18 or survey monuments, the local stakeholders may make  
19 changes to their monitoring network once per calendar year.  
20 Such changes, if made, shall be submitted to the Department  
21 by April 1 of each year.  
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23 **33A-11 Monitoring Protocol.**

24 a. All data shall be collected and recorded through  
25 methods generally accepted in the applicable scientific  
26 field.  
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33A-12 Review of Technical Data.

a. Standard methods for review and analysis of the collected data shall be established by the Water Advisory Committee. Such data shall be reviewed by the Technical Advisory Committee and reported to the Water Commission and the Board annually pursuant to established protocol.

b. During the irrigation season, the Technical Advisory Committee shall review and analyze data for compliance with the current BMO. During the non-irrigation season, the focus shall be on review of BMO compliance for the previous irrigation season and development of new BMO criteria for the following year, if necessary. New BMO criteria shall be developed by sub-inventory unit stakeholders and presented at the first regular meeting of the Board in April of each year.

1. The Department shall establish methods for data collection, storage and dissemination. Methods for collecting groundwater elevations, groundwater quality, and land subsidence shall follow established quality assurance and quality control guidelines.

2. The Department shall disseminate the monitoring data through public presentations and through Internet access on the Department website. At a minimum, the Department shall publicly present findings from the monitoring program on an annual basis to the Board of Supervisors.

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**33A-13 Action by Technical Advisory Committee.**

a. All BMO noncompliance issues shall be resolved through a collaborative process at the sub-inventory unit level, if at all possible. However, in the event that an area of BMO noncompliance is identified to the Department, the Technical Advisory Committee shall investigate and report to the Water Advisory Committee and Water Commission the areal extent and magnitude of the non-compliance. This information shall also be released to the public. This report shall be made in a timely manner not to exceed fourteen (14) days from the time that BMO noncompliance was identified. The Technical Advisory Committee shall not investigate and report any alleged or identified noncompliance in any area until Basin Management Objectives have been approved by the Board of Supervisors in all sub-inventory units within the area allegedly affected.

b. The Technical Advisory Committee shall then collect all available pertinent hydrologic data and investigate possible causes for the BMO non-compliance. The Technical Advisory Committee shall recommend actions to resolve the BMO non-compliance to the Water Advisory Committee, Water Commission, and the Department. The initial Technical Advisory Committee recommendations shall be made in a timely manner not to exceed thirty (30) days from the time at which BMO non-compliance was reported. The Technical Advisory Committee shall first make recommendations that focus on resolving the BMO non-

1 compliance through negotiations with all parties in the  
2 impacted/impacting area(s).

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4 **33A-14 Action by Water Advisory Committee.**

5 a. If the noncompliance cannot be resolved through  
6 a collaborative process at the sub-inventory unit level or  
7 through the review and recommendations of the Technical  
8 Advisory Committee and if negotiations with parties in the  
9 impacted area do not result in a timely and positive action  
10 to re-establish BMO compliance within five (5) days, the  
11 Water Advisory Committee may recommend a plan to the Water  
12 Commission to modify, reduce or terminate groundwater  
13 extraction in the impacted/impacting area(s). This action  
14 shall only be taken on the recommendation of the Water  
15 Advisory Committee after a thorough technical review of the  
16 data.”

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18 Section 2. Severability.

19 If any provision of this Ordinance or the application thereof to  
20 any person or circumstances is for any reason held to be invalid by  
21 a court of competent jurisdiction, such provision shall be deemed  
22 severable, and the invalidity thereof shall not affect the remaining  
23 provisions or other applications of the Ordinance which can be given  
24 effect without the invalid provision or application thereof.

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26 Section 6. Effective Date and Publication. This Ordinance shall take  
27 effect thirty (30) days after the date of its passage. The Clerk of

1 the Board of Supervisors is authorized and directed to publish this  
2 ordinance before the expiration of fifteen (15) days after its  
3 passage. This Ordinance shall be published once, with the names of  
4 the members of the Board of Supervisors voting for and against it, in  
5 the Enterprise-Record, a newspaper of general  
6 circulation published in the County of Butte, State of California.


7 PASSED AND ADOPTED by the Board of Supervisors of the County of  
8 Butte, State of California, on the 10th day of February,  
9 2004, by the following vote:

10 AYES: Supervisors Dolan, Houx, Josiassen, Yamaguchi and Chair Beeler

11 NOES: None

12 ABSENT: None

13 NOT VOTING: None

14   
15 R.J. BEELER, Chair of the  
16 Butte County Board of Supervisors

17 ATTEST:

18 PAUL McINTOSH, Chief  
19 Administrative Officer  
20 and Clerk of the Board

21 By   
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