



State Water Resources Control Board



Alan C. Lloyd, Ph.D.
Agency Secretary

Division of Water Rights
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Mailing Address: P.O. Box 2000 ♦ Sacramento, California 95812-2000
FAX: 916.341.5400 ♦ www.waterrights.ca.gov

Arnold Schwarzenegger
Governor

LICENSE 659

APPLICATION NO. _____
(Leave blank)

DIV. OF WATER RIGHTS
2010 DEC 23 PM 2:30
WATER RESOURCES

UNDERGROUND STORAGE SUPPLEMENT to APPLICATION TO APPROPRIATE WATER BY PERMIT

1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form APP.

Please See Attachment 1

- a. Maximum Rate of diversions (1) _____ (2) _____ (3) _____ cfs
- b. Maximum Annual Amount (1) _____ (2) _____ (3) _____ acre-feet

2. Describe any works used to divert to offstream spreading grounds or injection wells not identified in item 7 of form APP.

Please See Attachment 1

3. Describe spreading grounds and identify its location and number of acres or location of upstream and downstream limits if onstream.

Please See Attachment 1

4. State depth of groundwater table in spreading grounds or immediate vicinity: Please See Attachment 1

_____ feet below ground surface on _____ 19 __ measured at a point located within the _____ ¼ of _____ ¼ of Section _____, T _____, R _____, _____ B&M

5. Give any historic maximum and or minimum depths to the groundwater table in the area.

- Location _____ Maximum _____ feet below ground surface on _____ (date)
- Location _____ Maximum _____ feet below ground surface on _____ (date)

Please See Attachment 1

6. Describe proposed spreading operation.

Please See Attachment 1

7. Describe location, capacity and features of proposed pretreatment facilities and/or injected wells.

Please See Attachment 1

8. Reference any available engineering reports, studies, or data on the aquifer involved.

Please See Attachment 1

Additional copies of this form and water right information can be obtained at www.waterrights.ca.gov.

9. Describe underground reservoir and attach a map or sketch of its location. _____

Please See Attachments 1 and 2

10. State estimated storage capacity of underground reservoir. _____

Please See Attachment 1

11. Describe existing use of the underground storage reservoir and any proposed change in its use. _____

Please See Attachment 1

12. Describe the proposed method and location of measurement of water placed into and withdrawn from underground storage. _____

Please See Attachment 1

Attachment 1
Petition for Change
License 659
Underground Storage Supplement

Item 1

Maximum Rate of Diversion: 0.16 cfs

Maximum Annual Amount: 116 acre-feet

Item 2

The existing point of diversion includes facilities that can be used to divert water to the proposed downstream spreading areas. The Tribe is prepared to install appropriate devices to measure the quantity of water diverted for subsequent downstream spreading. There will be no additional works constructed.

Item 3

The diverted water will be allowed to flow through existing facilities. There are not defined off-stream spreading grounds; instead, the diverted water will be allowed to percolate within the drainage area on the Tribe's property. The spreading areas are located in portions of Section 32 of T2S, R2E, San Bernardino Base and Meridian (SBB&M) and all or portion of Sections 4, 5, 8, and 9 of T3S, T2E, SBB&M. The total area of the spreading grounds is approximately 2,500 acres.

Item 4

Depth of groundwater table in spreading grounds or immediate vicinity:

606 feet below ground surface during December 2009 measured at a point located within the NW ¼ of the SE ¼ of Section 01, T 03S, R 01E, SB B&M (Cobblestone Well)

Item 5

Historical maximum and minimum depths to the groundwater are provided below based on available data for the Tribe's Cobblestone Well for the period from January 2003 to December 2009.

Location: NW ¼ of SE ¼ of Section 01, T 03S, R 01E, SB B&M

Maximum: 615 feet below ground surface during December 2007

Minimum: 548 feet below ground surface during January 2003

Item 6

Surface water from Millard Canyon will be diverted at the existing point of diversion into existing facilities and allowed to percolate in spreading areas. The spreading areas are located in portions of Section 32 of T2S, R2E, SBB&M and all or portion of Sections 4, 5, 8, and 9 of T3S, T2E, SBB&M. Measuring devices will be installed to measure the quantity of water diverted to the spreading areas for groundwater percolation.

Item 7

Not Applicable. There are no proposed pretreatment facilities or injection wells.

Item 8

"Geology, Ground-Water Hydrology, Geochemistry, and Ground-Water Simulation of the Beaumont and Banning Storage Units, San Gorgonio Pass Area, Riverside County, California", United State Geological Survey, 2006 (See attached.)

"Bulletin 118, California's Groundwater", California Department of Water Resources (CDWR), Update February 2004 (See attached.)

"Water Supply and Use in the Morongo-Cabazon Area," N. Thomas Sheahan, C.HG. and W. Greg Hamer, C.HG., July 1999 (See attached.)

"Final Draft Evaluation of Water Resources on the Morongo Reservation, Phase II", Natural Resources Consulting Engineers (NRCE), June 2006 (See attached.)

Item 9

The spreading areas overlie the "Cabazon storage unit" of the "San Gorgonio Pass Basin". The San Gorgonio Pass Basin is bounded on the north by the San Bernardino Mountains and by semi-permeable rocks, and on the south by the San Jacinto Mountains. A surface drainage divide between the Colorado River and South Coastal Hydrologic Study Areas bounds the San Gorgonio Pass Basin on the west. The eastern boundary is formed by a bedrock constriction that creates a groundwater cascade into the Indio Subbasin (CDWR 1964)," (CDWR Bulletin 118, Update February 2004). The location of the Cabazon storage unit, a part of the San Gorgonio Pass Basin, is provided in Attachment 2.

Item 10

The spreading areas overlie the "Cabazon storage unit" of the "San Gorgonio Pass Basin". The amount of groundwater storage in the San Gorgonio Pass Basin was estimated to be approximately 2.2 million acre-feet in CDWR Bulletin 118, Update February 2004. The amount of groundwater storage in the Banning and Cabazon storage units (both of which are part of the San Gorgonio Pass Basin) was estimated to be approximately 1.1 million acre-feet in 1996 by CDWR (NRCE's "Final Draft Evaluation of Water Resources on the Morongo, June 2006).

Item 11

The San Gorgonio Pass Basin is an unadjudicated groundwater basin which supports existing groundwater extractions. It is believed there are no existing groundwater replenishment

activities. The proposed groundwater storage program will temporarily store diverted surface water which will subsequently be used to support future groundwater extractions by the Tribe.

Item 12

Measuring devices will be installed to measure the quantity of water diverted to the spreading areas for groundwater percolation. In addition, measuring devices will be installed at all extraction wells.



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1. State amount of water to be diverted to underground storage from each point of diversion in item 3b of form APP.

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Attachment 1
Petition for Change
License 660
Underground Storage Supplement

Item 1

Maximum Rate of Diversion: 0.50 cfs

Maximum Annual Amount: 362 acre-feet

Item 2

The existing point of diversion includes facilities that can be used to divert water to the proposed downstream spreading areas. The Tribe is prepared to install appropriate devices to measure the quantity of water diverted for subsequent downstream spreading. There will be no additional works constructed.

Item 3

The diverted water will be allowed to flow through existing facilities. There are not defined off-stream spreading grounds; instead, the diverted water will be allowed to percolate within the drainage area on the Tribe's property. The spreading areas are located in portions of Section 32 of T2S, R2E, San Bernardino Base and Meridian (SBB&M) and all or portion of Sections 4, 5, 8, and 9 of T3S, T2E, SBB&M. The total area of the spreading grounds is approximately 2,500 acres.

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Attachment 1
Petition for Change
License 174
Underground Storage Supplement

Item 1

Maximum Rate of Diversion: 2.5 cfs

Maximum Annual Amount: 1,810 acre-feet

Item 2

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PERMITTED PLACE OF USE :

- ① LICENSE 174(2.5 CFS) - IRRIGATION / DOMESTIC FOR 376.50 ACRES WITHIN SUBDIVISIONS NOS. 1 AND 2 CABAZON TOWNSITE AND RANCHO (AREA NOT SHOWN).
- ② LICENSE 659(0.16 CFS) - IRRIGATION FOR 10 ACRES IN NE1/4 OF SW1/4 OF SEC.32, T 2 S, R 2 E, S.B.B. & M. 3 ACRES IN SE1/4 OF SW1/4 OF SEC.32, T 2 S, R 2 E, S.B.B. & M.
- ③ LICENSE 660(0.50 CFS) - DOMESTIC; INDUSTRIAL FOR NE1/4 OF NW1/4 OF SEC.16, T 3 S, R 2 E, S.B.B. & M. NW1/4 OF NE1/4 OF SEC.16, T 3 S, R 2 E, S.B.B. & M.

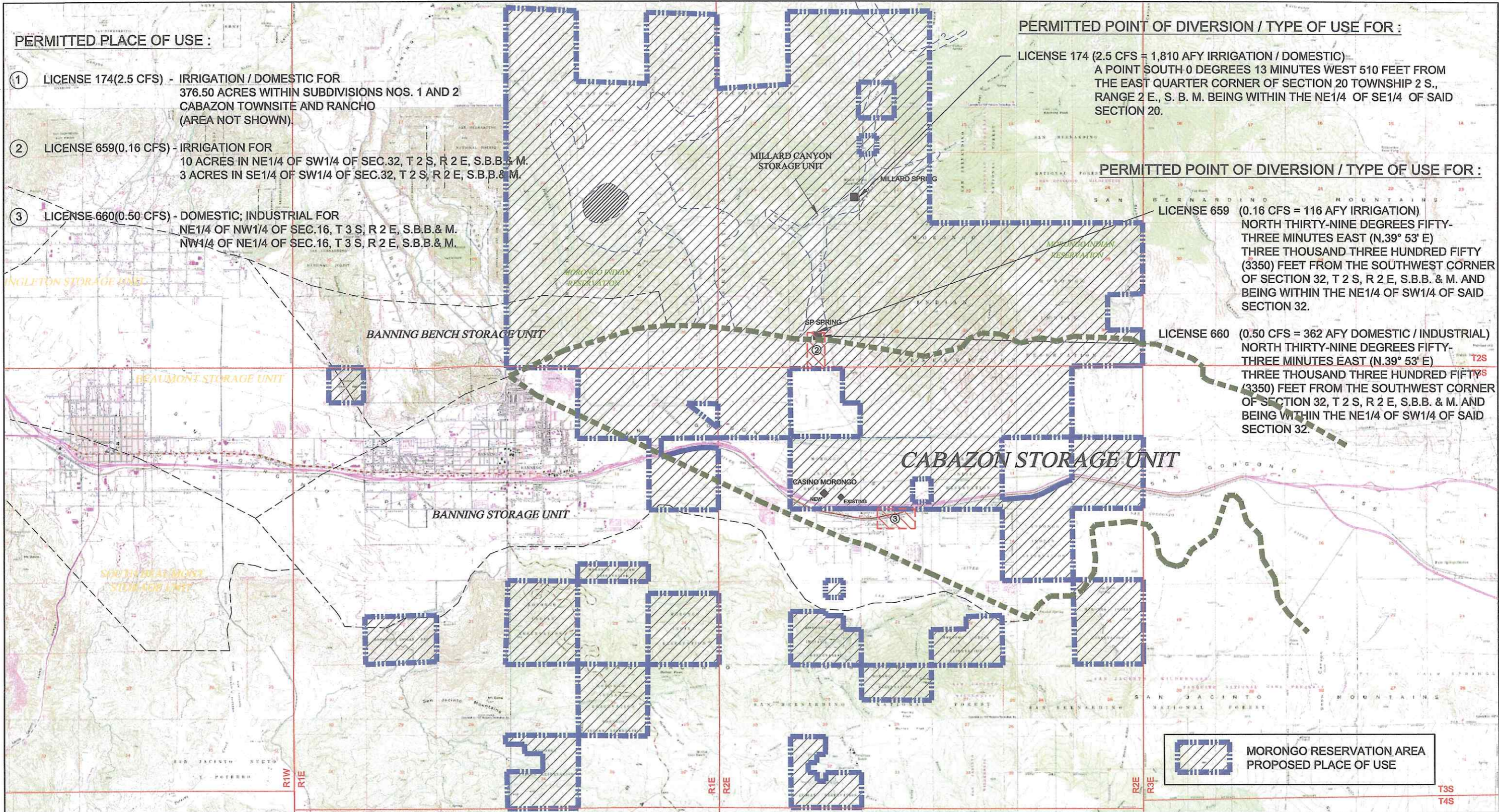
PERMITTED POINT OF DIVERSION / TYPE OF USE FOR :


LICENSE 174 (2.5 CFS = 1,810 AFY IRRIGATION / DOMESTIC)
 A POINT SOUTH 0 DEGREES 13 MINUTES WEST 510 FEET FROM THE EAST QUARTER CORNER OF SECTION 20 TOWNSHIP 2 S., RANGE 2 E., S. B. M. BEING WITHIN THE NE1/4 OF SE1/4 OF SAID SECTION 20.

PERMITTED POINT OF DIVERSION / TYPE OF USE FOR :

LICENSE 659 (0.16 CFS = 116 AFY IRRIGATION)
 NORTH THIRTY-NINE DEGREES FIFTY-THREE MINUTES EAST (N.39° 53' E) THREE THOUSAND THREE HUNDRED FIFTY (3350) FEET FROM THE SOUTHWEST CORNER OF SECTION 32, T 2 S, R 2 E, S.B.B. & M. AND BEING WITHIN THE NE1/4 OF SW1/4 OF SAID SECTION 32.

LICENSE 660 (0.50 CFS = 362 AFY DOMESTIC / INDUSTRIAL)
 NORTH THIRTY-NINE DEGREES FIFTY-THREE MINUTES EAST (N.39° 53' E) THREE THOUSAND THREE HUNDRED FIFTY (3350) FEET FROM THE SOUTHWEST CORNER OF SECTION 32, T 2 S, R 2 E, S.B.B. & M. AND BEING WITHIN THE NE1/4 OF SW1/4 OF SAID SECTION 32.




 MORONGO RESERVATION AREA PROPOSED PLACE OF USE

 APPROXIMATE BOUNDARY OF STORAGE UNIT IDENTIFIED BY U.S. GEOLOGICAL SURVEY	 APPROXIMATE BOUNDARY OF STORAGE UNIT NOT IDENTIFIED BY U.S. GEOLOGICAL SURVEY	 MORONGO RESERVATION AREA	 CURRENT PERMITTED PLACE OF USE	 DIVERSION POINT	 SPRING	 WATER TANK	 GENERAL GROUNDWATER FLOW DIRECTION
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STETSON ENGINEERS INC.
 861 VILLAGE OAKS DRIVE, SUITE 100
 COVINA, CALIFORNIA 91724
 TEL: (626) 967-6202
 FAX: (626) 331-7055

2171 E Francisco Blvd., Suite K
 San Rafael California 94901

2651 W Guadalupe Rd., Suite A209
 Mesa Arizona 85202


 APPROX. SCALE:
 0 3,500' 7,000'

MORONGO BAND OF MISSION INDIANS

LOCATION MAP OF CABAZON STORAGE UNIT (SAN GORGONIO PASS BASIN)


 A SOVEREIGN NATION