

Attachment 1

Temporary Permit Application No. 32231

Santa Margarita Water District

The following information is provided to address and support the findings required for the District's Temporary Permit (Application No. 32231) pursuant to Water Code Section 1425. The requirements (provided in *italics*) and responses are set forth below.

1425(b)(1) *The applicant has an urgent need for the water proposed to be diverted and used.* The Santa Margarita Water District has an urgent need in several respects for the water to be diverted and used under a Temporary Permit. The District relies entirely upon imported water purchased from the Metropolitan Water District of Southern California (MWD) to serve the demands of the Coto de Caza community and other portions of the District's service area. Numerous factors are affecting the short, intermediate and long-term availability and reliability of imported water supplies purchased from MWD. By way of example, and without limitation, the delivery of State Water Project (SWP) supplies from the Sacramento-San Joaquin Delta continue to be constrained by regulatory and legal decisions affecting coordinated operations of the SWP and federal Central Valley Project. (See, e.g., Biological Opinions prepared and adopted by the U.S. Fish and Wildlife Service and National Marine Fisheries Service pursuant to the federal Endangered Species Act; Consistency determinations by the California Department of Fish and Wildlife pursuant to the California Endangered Species Act; Ongoing state and federal court litigation regarding Delta diversions and flow conditions; State Board proceedings affecting Delta flow conditions). In 2013, the Department of Water Resources (DWR) announced that projected delivery capabilities of the SWP are reduced to 35 percent of the contractors' allocations due to below average statewide snowpack and precipitation. DWR has also announced events in preparation for the possibility that water year 2014 could be a third consecutive dry year.

The availability and reliability of Colorado River supplies are subject to similar constraints, such as legal challenges against the Quantification Settlement Agreement and state and federal Endangered Species Act protections within the Colorado River Basin. In addition, the delivery of SWP and Colorado River supplies are projected to be reduced by further regulatory and environmental restrictions, water quality limitations, drought conditions and other potential constraints attributable to climate change. These and other conditions reduce the availability and reliability of imported water supplies to serve demands within the District. To this end, the project is intended to reduce the District's demands on imported water by capturing and reusing return flows attributable to imported water that the District serves to the Coto de Caza community. The District's reduced reliance on imported water supplies will in turn assist in maximizing the reasonable and beneficial use of limited imported water supplies in accordance with Article X, Section 2 of the California Constitution and other established water policies of the State. Another urgent need of the District is to satisfy the grant funding conditions that have been established by the State Water Resources Control Board, Division of Financial Assistance. The Division has expressed immediate timeframes within which the District must satisfy the grant funding conditions, including water rights compliance, and has indicated that grant funding

for the project is at risk if the conditions are not satisfied in a timely manner. The District has simultaneously submitted an Application to Appropriate Water for the same diversion and use pursuant to Water Code section 1250 et seq.

1425(b)(2) *The water may be diverted and used without injury to any lawful user of water.* As set forth above and in the District's Application, all water to be diverted and reasonably and beneficially used by the project is attributable to return flows from imported water that the District purchases from the Metropolitan Water District of Southern California and serves to the Coto de Caza community. All such return flow waters to be diverted and used by the project have been imported and developed by the District and are foreign to Gobernadora Creek and its watershed. Riparian rights do not attach to said waters and there is no record of prior appropriative rights established to such return flow waters that are captured in the Creek. As such the water may be diverted and used without injury to any lawful user of water.

1425(b)(3) *The water may be diverted and used without unreasonable effect upon fish, wildlife, and other in stream beneficial uses.* The diversion and use of water under the Temporary Permit will not unreasonably affect fish, wildlife, or other instream beneficial uses, nor will the diversion and use of water impair the scenic, recreational, fishery or wildlife values of Gobernadora Creek or its watershed. As set forth in the Application, the project has undergone an extensive environmental review process, including CEQA review and an HCCP process involving agencies such as the U.S. Army Corps of Engineers (Section 404 compliance), the California Department of Fish and Wildlife (Section 1602 compliance), and the Regional Water Quality Control Board (Section 401 compliance) which, among a variety of other conditions, requires the continual monitoring of the downstream ecological restoration area and preserve to ensure there are no negative impacts that can be attributed to the project. Features have been designed into the project facility that improves water quality in the Creek downstream of the project following the natural wetlands treatment process to support downstream uses. Groundwater studies have been performed on the shallow alluvial areas downstream of the project which show there is sufficient groundwater available to support the ecological restoration area without flows in Gobernadora Creek attributable to returns from imported water. Furthermore, the construction and operation of the project (including but not limited to the two inflatable dams in the Creek) will not constitute a barrier to upstream or downstream movement or passage of aquatic life. Historically, Gobernadora Creek has been an intermittent drainage and does not exhibit surface flows throughout the year. The Creek does not contain a resident fish population, and the connection between the mouth of Gobernadora Creek and San Juan Creek consists of a very steep and eroded section that precludes fish passage into Gobernadora Creek. The CEQA review referred to above showed that the project and project construction will not have negative effects on downstream riparian habitat due to the volume of shallow groundwater in Gobernadora Canyon and areas downstream of the project, and pursuant to the above-referenced requirement that continual monitoring occur of the downstream ecological restoration area and preserve to ensure there are no negative impacts that can be attributed to the project. Additionally, pursuant to the Section 401 certification process, the District will be required to monitor and mitigate any potential short-term impacts during the construction period to ensure that the downstream riparian habitat is not adversely affected by project construction.

1425(b)(4) *The proposed diversion and use are in the public interest, including findings to support permit conditions imposed to ensure that the water is diverted and used in the public interest, without injury to any lawful user of water, and without unreasonable effect upon fish, wildlife, and other in stream beneficial uses.* As indicated above and in the District's Application, the proposed diversion and use of water by the project are in the public interest and will not injure any lawful user of water or unreasonably affect fish, wildlife or other instream beneficial uses. The project is intended to reduce the District's demands on imported water by capturing and reusing return flows attributable to imported water that the District serves to the Coto de Caza community. The diverted water that is put back into the non-domestic irrigation system will benefit the public by reducing the dependence on imported potable water which is currently the primary source of non-domestic water for the area. The District's reduced reliance on imported water supplies will in turn assist in maximizing the reasonable and beneficial use of limited imported water supplies on a regional and statewide basis in accordance with Article X, Section 2 of the California Constitution and other established water policies of the State. The public's interest is also benefitted through the improved water quality to Gobernadora Creek and downstream areas as a result of the proposed project. Moreover, as set forth in the Application, the related component of the project is designed to attenuate storm and peak flow events, and thereby protect downstream environmental restoration areas, public infrastructure, and communities from storm water damages.

## Attachment 2

The purpose of the Gobernadora Multipurpose Basin (GMB) project is to recapture return flows from foreign imported water that the Santa Margarita Water District (District) purchases from the Metropolitan Water District of Southern California (MWD) and serves to the Coto de Caza community. The District currently utilizes imported water to serve all of the water demands within Coto de Caza. Imported water that is used for outdoor urban irrigation and the irrigation of parks, community open space, green belt, and golf course areas generates return flow that is channeled into Gobernadora Creek. The project will capture the return flow so that it can be reused for irrigation purposes within Coto de Caza. In addition, the project will improve downstream water quality and provide storm attenuation that will help protect downstream ecological areas and other facilities from damage during peak storm events. As further described below and in other Attachments, the project consists of two earthen basins, two inflatable dams with concrete approach aprons, two groundwater wells, a return water pump station, and associated piping and electrical appurtenances.

There are two methods by which imported water return flows will be captured by the project: 1) non-storm surface return flows will be diverted from the Creek by the upper inflatable dam over a side weir into the upper earthen basin located adjacent to the Creek; and 2) non-storm subsurface return flows beneath the upper basin will be pumped from two wells that are located in the upper basin to ensure the structural integrity of the earthen berms that form the basins. The wells are being constructed with a 15 foot sanitary seal and fitted with well screens that range from 15 to 65 feet below ground surface. Each pump is sized to handle 100 gallons per minute (gpm) @ 40 feet of Total Dynamic Head (TDH).

During non-storm conditions, the upper dam will be inflated and return flows will be diverted from the Creek into the upper basin. The upper basin is divided into five separate cells that will provide various levels of natural wetlands treatment. As return flow water passes through the treatment cells of the upper basin, it can be collected by a pump station and placed into the District's non-domestic irrigation system for reuse in Coto de Caza. Return flows that infiltrate the subsurface of the upper basin or otherwise exist in that subsurface space can be produced from the two wells located in the upper basin and directed to the pump station. Return flows can also be allowed to pass through all five cells of the upper basin and return to the Creek. Pursuant to an extensive environmental review process, including review by the U.S. Army Corps of Engineers (Section 404 compliance), the California Department of Fish and Wildlife (Section 1602 compliance), and the Regional Water Quality Control Board (Section 401 compliance), continual monitoring will occur to ensure the project does not harm the downstream Gobernadora Ecological Restoration Area. As necessary, return flows in the upper basin can be directed back to the Creek.

The upper basin is designed to accommodate a maximum capacity of 34 acre-feet. The retention time for return flows to remain in the upper basin before being pumped into the District's irrigation system or returned to the Creek is expected to range from 16.5 hours to less than 30 days. Due to the regulating nature of the upper basin and the short retention periods described above, the District does not consider or propose to use the upper basin component of the project as a storage facility. All return flows pumped from the upper basin or the upper basin wells to the District's non-domestic irrigation system are either reused immediately to meet irrigation demands in Coto de Caza or re-directed to the District's Portola Reservoir for reuse later in meeting seasonal irrigation demands in Coto de Caza. The non-domestic irrigation system is an existing system comprised of various pipe sizes ranging from 6 to 12 inches. The Portola Reservoir is an existing open air, lined basin with a storage capacity of approximately

500 acre-feet. All return flows diverted and/or pumped from the project and/or subsequently re-directed to storage at the Portola Reservoir will be metered by the District.

During storm conditions, the upper dam will deflate and allow storm flows to bypass the project. When monitoring devices in the Creek signal flows equivalent to or greater than a 10-year storm event, the lower dam will inflate and divert storm flow into the lower earthen basin to attenuate the velocity of Creek flows and help protect downstream ecological areas and other facilities from flood damage. After the storm event, the lower dam will deflate and the storm flows that were diverted to the lower basin will be returned to the Creek over a two day period via a gravity drain pipe located in the lowest portion of the flood retention basin.

### Attachment 3

4a. All of the return flow being recaptured as a part of the Gobernadora Multipurpose Basin (GMB) project is being diverted by the upper inflatable dam into the upper basin. Additional flow from two shallow groundwater wells required to protect the structural integrity of the earthen berms will be added to the surface flows prior to introduction into the irrigation system. The groundwater flow will be metered prior to combining with the surface flows. The pumped combined flows will also be metered prior to introduction to the irrigation system. Due to the seasonal nature of irrigation demands, it is anticipated that approximately 400 acre feet per year of return flows (afy) will be used immediately within the irrigation system. An additional 400 afy of return flows are anticipated to be sent to the Portola Reservoir, a non-domestic water reservoir, during the low demand periods for storage. This water will then be fed back into the irrigation system during the higher demand periods. The volume of water that is put into the reservoir and that which is taken out will be determined using a combination of existing and new flow meters. The wells are being constructed with a 15 foot sanitary seal and fitted with well screens that range from 15 to 65 feet below ground surface.

Periodically a portion of the flow may be required to be reintroduced to the Creek from the upper basin. This flow will pass through a weir gate which is a portion of the pump station. The flow rate through the weir gate will be measured and recorded.

#### Attachment 4

5a. All of the return flows recaptured by the Gobernadora Multipurpose Basin (GMB) project is being diverted by the upper inflatable dam into the water quality basin. The actual diversion will occur over a basin side weir that is constructed as a portion of the water quality basin. This is identified as POD #1.

Groundwater well No. 1 is POD #2. The flow from this well will be metered for total flow.

Groundwater well No. 2 is POD #3. The flow from this well will be metered for total flow.

The combined flows from POD's 1, 2 and 3 will be metered to determine total flow.

Attachment 9

17b.

1. USFWS HCP issued January 10, 2007. Incidental Take Permit # TE144105-0

U.S. Fish & Wildlife Service  
Jonathan D. Snyder  
2177 Salk Avenue, Suite 250  
Carlsbad, California 92008  
760.431.9440 x 307  
[jonathan\\_d\\_snyder@fws.gov](mailto:jonathan_d_snyder@fws.gov)

2. Section 404 Individual Permit Letter of Permission

U.S. Army Corps of Engineers  
Regulatory Division  
Jason Lambert  
Regulatory Project Manager  
915 Wilshire Boulevard; 13 Floor  
Los Angeles, California 90017  
213.452.3361  
[Jason.P.Lambert@usace.army.mil](mailto:Jason.P.Lambert@usace.army.mil)

3. 401 Water Quality Certification

Regional Water Quality Control Board  
Darren Bradford  
Environmental Scientist  
9174 Sky Park Court, Suite 100  
San Diego, California 92123  
858.637-7137  
[dbradford@waterboards.ca.gov](mailto:dbradford@waterboards.ca.gov)

4. Section 1602 Master Streambed Alteration Agreement Sub-Notification Agreement

California Department of Fish & Wildlife  
Streambed Alteration Team  
Kevin Hupf  
3883 Ruffin Road  
San Diego, California 92123  
858.467-4223  
[khupf@wildlife.ca.gov](mailto:khupf@wildlife.ca.gov)



## 5. New Dam Application

Department of Water Resources  
Division of Safety of Dams  
Design Engineering Branch  
Jeffrey Kuhl  
2200 X Street, Suite 200  
Sacramento, CA 95818  
(916) 227-6739  
[jkuhl@water.ca.gov](mailto:jkuhl@water.ca.gov)

## Attachment 5

6a. As set forth in the District's Application, all water to be diverted and reasonably and beneficially used by the project is attributable to return flows from imported water that the District purchases from the Metropolitan Water District of Southern California and serves to the Coto de Caza community. All such return flow waters to be diverted and used by the project have been imported and developed by the District and are foreign to Gobernadora Creek and its watershed. Riparian rights do not attach to said waters and there is no record of prior appropriative rights established to such return flow waters that are captured in the Creek. As such unappropriated water is available for the proposed appropriation and the water may be diverted and used without injury to any lawful user of water.

Attachment 6

7a. The attached table provides the meter numbers for the various irrigation meters that will be served throughout the community. It is difficult to identify the specific Assessor's Parcel Numbers to the meters as these are Community Owned lots and the irrigation feeds can serve more than one parcel.

Santa Margarita Water District  
Irrigation Water Demands in Gobernadora Watershed  
Attachment 6

METER COUNT	PUMPING ZONE	CLASS OF SERVICE	SERVICE TYPE	IMPROVEMENT DISTRICT	CONSUMPTION (CCF)	CONSUMPTION (AF/YR)
152	40	GB	ID	2	21,083	48.52
12	C5	GM	IN	2	2,765	6.36
12	B4	GB	IN	2	839	1.93
48	C5	GB	IN	2	3,617	8.32
23	C5	GM	IN	2	2,421	5.57
36	C4	GB	IN	2	3,020	6.95
13	C4	GM	IN	2	2,482	5.71
1	40	R	IN	2	-	-
1	C4	GM	IN	2	-	-
12	C4	GB	IN	2	519	1.19
11	C4	GM	IN	2	2,723	6.27
24	C4	GB	IN	2	2,444	5.62
13	C4	GM	IN	2	3,151	7.25
1	40	R	IN	2	-	-
24	C4	GM	IN	2	3,155	7.26
1	40	R	IN	2	-	-
3	C4	GM	IN	2	429	0.99
12	40	GB	ID	2	57	0.13
50	C4	GM	IN	2	4,157	9.57
24	C4	GB	IN	2	5,029	11.57
110	40	GB	ID	2	12,012	27.65
12	B4	GB	IN	2	15,706	36.15
404	40	GB	ID	2	55,491	127.71
12	B4	GB	IN	2	157,341	362.13
258	40	GB	ID	2	30,833	70.96
38	50	GB	ID	2	2,839	6.53
86	40	GB	ID	2	23,985	55.20
6	C5	GM	IN	2	1,012	2.33
1	50	R	IN	2	-	-
3	C5	GM	IN	2	329	0.76
84	40	GB	ID	2	14,972	34.46
36	B4	GB	IN	2	9,374	21.57
12	C4	GM	IN	2	5,546	12.76
12	40	GB	ID	2	3,621	8.33
12	C4	GM	IN	2	2,434	5.60
19	C5	GM	IN	2	2,162	4.98
1	50	R	IN	2	-	-
5	C5	GM	IN	2	744	1.71
1	50	R	IN	2	-	-
12	C4	GM	IN	2	1,873	4.31
48	B4	GB	IN	2	14,192	32.66
12	C5	GM	IN	2	3,894	8.96
36	B4	GB	IN	2	33,170	76.34
12	40	GB	ID	2	1,625	3.74
182	B4	GB	IN	2	38,180	87.87
12	40	GB	ID	2	1,499	3.45
84	B4	GB	IN	2	10,953	25.21
24	40	GB	ID	2	2,688	6.19
72	B4	GB	IN	2	10,693	24.61
108	40	GB	ID	2	12,060	27.76
12	C5	GM	IN	2	550	1.27
24	40	GB	ID	2	3,407	7.84
3	40	DF	ID	2	-	-
38	B4	GB	IN	2	1,001	2.30
120	40	GB	ID	2	11,796	27.15
24	B4	GB	IN	2	5,163	11.88
48	40	GB	ID	2	6,964	16.03
228	B4	GB	IN	2	32,324	74.39

12	40	GB	ID	2	808	1.86
108	B4	GB	IN	2	24,465	56.31
26	40	GB	ID	2	8,763	20.17
12	B4	GB	IN	2	4,589	10.56
12	40	GB	ID	2	619	1.42
36	B4	GB	IN	2	7,328	16.87
12	40	GB	ID	2	676	1.56
24	B4	GB	IN	2	3,608	8.30
12	40	GB	ID	2	1,198	2.76
16	B4	GB	IN	2	2,068	4.76
12	40	GB	ID	2	1,791	4.12
180	B4	GB	IN	2	28,443	65.46
12	40	GB	ID	2	2,136	4.92
36	B4	GB	IN	2	2,838	6.53
60	40	GB	ID	2	11,803	27.17
11	C4	GM	IN	2	1,466	3.37
60	B4	GB	IN	2	8,192	18.85
12	40	GB	ID	2	91	0.21
108	B4	GB	IN	2	13,948	32.10
12	40	GB	ID	2	32	0.07
420	B4	GB	IN	2	53,720	123.64
10	C4	GM	IN	2	86	0.20
72	B4	GB	IN	2	17,316	39.85
24	C4	GM	IN	2	2,430	5.59
12	B4	GB	IN	2	1,616	3.72
12	C5	GM	IN	2	2,345	5.40
1	50	R	IN	2	-	-
12	C5	GM	IN	2	4,303	9.90
11	C4	GM	IN	2	2,189	5.04
11	C5	GM	IN	2	979	2.25
12	40	GB	ID	2	4,473	10.29
12	C5	GM	IN	2	2,753	6.34
9	C4	GM	IN	2	883	2.03
4075					<hr/> 806,279	<hr/> 1,855.68

## Attachment 7

10c. The project consists of two basins, two inflatable dams and a pump station. The intent is for the upper dam to be normally inflated. This will divert the flow over the constructed side weir of the upper basin into a five cell natural wetlands treatment train. At the end of the fifth cell, the flow will enter into a wet well. This wet well has a weir that allows for return flow back to the creek that will vary depending on the environmental demands downstream of the project. The remainder of the flow will be pumped into the non-domestic water system serving the Coto de Caza area. This is an existing system with the newly diverted water substituting for the imported water that is currently being used to supply the non-domestic system.

During storm events, the upper dam will be deflated and the flows allowed to flow downstream in the Creek. Once the storm event is complete, the upper dam will be reflat. The system operation will revert to that explained above.

During storm events that are 10-year events or larger, the upper dam will be deflated and the lower dam will inflate. This will divert flow into the lower basin that will serve as a flood water detention basin. The flow will exit the lower basin through an outlet pipe near the southwest corner of the basin. It is anticipated that the contents of the basin will be emptied in approximately two days. After the rain event ends, the basin will have emptied, the lower dam deflated and the upper dam reflat.