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Goleta Water District

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1 **Introduction**

2 Policies that impact the operation of the Goleta Water District (GWD) descend from various
3 levels of authority. As these settle down they lay heavily on top of the GWD management. Policy dictates
4 from those who exercise overarching authority tend to exert pressure by way of subsidies from taxes
5 collected across the board imposed upon all local individuals and corporations. That is, federal taxes are
6 partially returned to the local authorities only insofar as that local authority abides by applicable federal
7 mandates.

8 This paper is a “collection” (see references) and a high level analysis of the extant policy
9 documents which directly or indirectly apply to the operation of the GWD. This listing is in no way
10 completely exhaustive, but only includes those which sufficiently show the major impacts the subject
11 small-scale family crop farmers, of policy with respect to drought responses.

12 **Global**

13 The United Nations has been the source of many documents espousing environmental causes, and
14 calls to action, in favor of various ecological conservation efforts. Few if any of these amount to binding
15 policies for the signatories; even if the respective national governments ratify the document.

16 With each treaty where the USA is a signatory, generally the following statement is appended
17 thereto:

18 “The United States hereby declares, pursuant to Article 30, paragraph 5, that any amendment to
19 an annex to the Convention shall enter into force for the United States only upon the deposit of its
20 instrument of ratification, acceptance, approval, or accession with respect thereto.” Thus for the most part
21 very few dictates of the global community have become policy applicable to any water district within the
22 USA.

23 In addition the United Nations engages the process of coordinating the various efforts of UN
24 work on water issues and sanitation through the UN-Water organization (UN-Water, 2017). UN-Water's
25 Policy Briefs provide short and informative analyses on issues that draw upon the combined expertise of
26 the United Nations System. They are the UN's joint position in the subject in question, but don't have the

27 effect of a policy (Tamara Slowik, UN-Water Technical Advisory Unit, personal communication, July 26,
28 2017).

29 **National**

30 The United States Federal Government (USG) executive branch defines policy based upon
31 legislative documents signed into law by the President of the United States (POTUS). Two recent major
32 documents were the Federal Water Pollution Control Act, of November 27, 2002 and the Safe Drinking
33 Water Act of December 31, 2002 (USEPA, 2002).

34 The U.S. Code › Title 43 § 661 - 666, include codes which apply to water in general and “public”
35 water in particular. These deal with appropriation on public lands; rights of way for canals and ditches,
36 Reservation of reservoir sites generally, et al.

37 Though these documents certainly are applicable to the location where much the customer base of
38 Goleta Water District resides, the specific codes are largely at a level where they do not directly impact
39 the intended subject of this research.

40 **State**

41 The state of California water policies reach back to the days of the Spanish conquest. Previous to
42 this era the indigenous tribes rarely had any significant issues since their population size did not
43 impose a demand on the natural water flows that exceeded its capacity. The Spanish Conquistadores
44 essentially came in and claimed the area as belonging to their then current royalty defining the water as
45 property of the kingdom. Water from that perspective was considered to be available to all for private
46 uses. When land was granted to an individual or family, the water rights also only applied to domestic use
47 (Dravnieks 2001, pp3-4).

48 When California was ceded to the United States by Mexico through the Treaty of Guadalupe-
49 Hidalgo there was no US based governing body nor codified policies regarding property or water rights
50 (Dravnieks 2001, pp6-7).

51 Present day water policy at the state level falls under the auspices of the California Environmental
52 Protection Agency (CalEPA, 2012). The State Water Resources Control Board, an office under CalEPA,

53 operates via regional boards. The GWD falls under the Regional Water Quality Control Board, Central
54 Coast Region. The Water Quality Control Plan for the Central Coastal Basin (Central Coast Regional
55 Water Board, 2016) constitutes the primary policy document applicable to the GWD from state level
56 authority.

57 **County**

58 The county of Santa Barbara policy authority is the Water Resource Division (SBWRD) of the
59 Department of Public Works. The SBWRD consists of two separate dependant districts: the Santa
60 Barbara County Flood Control and Water Conservation District (FCD) and the County Water Agency
61 (SBWA) (Boelhouwer 2017).

62 The SBWA was established by the state legislature in 1945 to control and conserve storm, flood
63 and other surface waters for beneficial use and to enter into contracts for water supply (Boelhouwer
64 2017).

65 The FCD was created in 1955 by the State legislature because of severe flooding and damage
66 resulting from storms in the early 1950s. The purpose of the FCD was to provide protection from flooding
67 and aid in conservation of storm and flood waters for public use.

68 In 1994, after a succession of county reorganizations, the County Water Agency and the Flood
69 Control District were combined to form the new Water Resources Division of the Public Works
70 Department.

71 The primary policy document issued by the County of Santa Barbara is the Integrated Regional
72 Water Management Program (Santa Barbara Water Resources, 2013).

73 **City**

74 The Goleta Water District came into existence in November of 1944 as a subdivision of the State
75 of California Water Code. At the time the region was in the midst of a severe drought just as it is
76 currently. Since then the area has experienced droughts during the periods of 1959 to 1962, 1976 to 1977,
77 1987 to 1992, 2007 to 2009, and the current episode beginning in 2012.

78 The Goleta Water District management consists of a board of five members (known as directors),
79 elected by the residents of the City of Goleta, and a professional staff (Goleta Water District, 2017,
80 January). The professional staff is lead by the General Manager and an Assistant General Manager, who
81 serves as the Chief of Staff. The board acts as a legislative body while the professional staff acts as an
82 executive element; the General Manager serving in the capacity of a chief executive. Board member
83 elections occur during the general and midterm election and are seated for four years. Thus in 2016 two of
84 the director seats were open and in 2018 three director seats will be open.

85 This area is generally described as having a “warm-summer Mediterranean” climate (Kesseli,
86 1942). Yet it has experienced severe droughts regularly, at least since 101 BCE, at a rate of 4.5/100 years
87 (Hughes & Brown, 1992). Thus, the Goleta Water District, in concert with the California Department of
88 Water Resources, and in conjunction with the various members of the Association of California Water
89 Agencies, have developed standards to define what constitutes a drought and what actions or user
90 restrictions are implemented and which particular points.

91 The Goleta Water District has established five water shortage stages each with specific triggers
92 and use reduction objectives (Kennedy/Jenks Consultants, 2010). The implementation of each stage is
93 dependent upon three basic criteria:

- 94 1. The reduction in available water sources relative to the normal expected demand for the
95 next twelve months.
- 96 2. The ability to provide a specific percentage of deliveries over the next twenty four month
- 97 3. Contamination of water supply

98 Thus, a water shortage is not only possible as a result of a naturally occurring drought but also
99 due to pollution of the various water sources.

100 The ongoing drought has triggered the various stages at the following points:

- 101 • Stage I March 2014
- 102 • Stage II September 2014
- 103 • Stage III May 2015.

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104 At the stage II the District did not impose mandatory irrigation restrictions or demand reductions
105 on agricultural customers. The stage III implementation included restrictions on the use of overhead
106 sprinklers on outdoor commercial crops and orchards. Outdoor crops and orchards irrigated with
107 overhead sprinklers could be watered before 10:00 A.M. and after 4:00 P.M. This would not apply to the
108 use of drip or micro-spray irrigation, or irrigation of indoor greenhouses.

109 The Goleta Water District board meets monthly as a whole. In this public venue proposed policy
110 changes are presented and considered by its members. Changes may be recommended by the Goleta
111 Water District professional staff and also by the customer community. Prior to their introduction,
112 proposals are reviewed by respective committees consisting of one or more members of the board and
113 professional staff. The respective committee may recommend acceptance or rejection.

114 A local municipal agency is the ideal entity to observe democracy in as pure an application as can
115 be found in a nation as large as the United States. The Goleta Water District, in effect a microscopic
116 democratic state, is an implementation of democracy. Boundaries of its power are delineated by
117 international, federal and state policies but within these limits the Goleta Water District and its
118 constituents operate as a democratic state with respect to water issues.

119 The foundational body of policy documents rests upon the Goleta Water District Code, with the
120 latest revision being completed and approved in 2006 (GWD, 2006). In addition, the district also adheres
121 to the Goleta Water District Water Supply Management Plan (Bachman, 2011), the Urban Water
122 Management Plan, updated in 2010 (Kennedy/Jenks Consultants, 2010) and the Ground Water
123 Management Plan, updated in 2016 (GSI Water Solutions, Inc., 2016). These documents distill the
124 voluminous regulatory and advisory documents that flow down to the district from the international,
125 federal, state and county agencies.

126 From the aforementioned documents, the Goleta Water District board and professional staff
127 developed and implemented various policy documents to address specific issues. These include
128 regulations applied when a drought is declared. The Goleta Water District Drought Preparedness and
129 Water Shortage Contingency Plan (Kennedy/Jenks Consultants, 2014) stipulates explicit “triggers” for

130 each of five stages of a water shortage emergency. The actions required for each stage included elements
131 of public outreach, demand reduction, enforcement and other operational efforts (Goleta Water District,
132 2014, November).

133 Public outreach consists of public service announcements on local media outlets, publicly
134 displayed signage as well as messages that target specific customer groups (Goleta Water District, 2014,
135 November). Information regarding the drought condition is added to regular billing documents in both
136 hard copy and digital. The Goleta Water District website (<http://www.goletawater.com/>) scrolls a series of
137 message and provides a “Drought Portals” (<http://www.goletawater.com/drought-portals>) page with links
138 to water usage reduction information for each of the customer groups. The portal for urban agricultural
139 customers (<http://www.goletawater.com/drought-portals/urbanagdroughtportal>) provides and explanation
140 of the current reduction requirements in addition to data (updated monthly) indicating historical water use
141 by the agricultural customer community.

142 Demand reduction entails such limitations as landscape watering and vehicle washing restrictions,
143 allowing residential watering after sunset and before sunrise. Vehicle washing is only allowed at
144 commercial car washing facilities or by use of a bucket and/or hose with a shutoff nozzle. Water uses
145 such as cleaning sidewalks and drives ways, and other paved surfaces, are prohibited. Swimming pools
146 may not be drained and refilled (Goleta Water District, 2014, November).

147 Enforcement consists of a series of actions; on a first violation the customer is notified directly by
148 district staff and educated regarding the demand reduction program currently in place. If there is a second
149 violation the customer receives a written citation. For three or more violations a fine is imposed and a
150 flow restrictor is installed on the customer’s connection (Goleta Water District, 2014, November).

151 Operational actions are related to the efforts of the Goleta Water District professional staff. Main,
152 street and hydrant flushing usage is reduced while maintenance efforts are stepped up to identify and
153 correct leaks in the distribution system. A hotline is enabled to allow reporting of usage violations and
154 well as system leaks. With the decreased demand the district then must consider the results of revenue
155 loss and therefore the subsequent budget impacts (Goleta Water District, 2014, November).

156 The above listed actions are only a small sample of those taken by the Goleta Water District. In
157 addition these efforts “snowball” as the district reaches each successive stage of a water shortage
158 emergency. Too, these actions are on top of the day to day operational functions that are necessary for the
159 administration of the district even in the best state of water supply and demand.

160 The tactics, techniques, and procedures (TT&Ps) defined by the board and employed by the
161 professional staff of the Goleta Water District are subject to change based upon input from the customer
162 base, the staff and the board. It is also possible to act upon recommendations from external sources such
163 as state, federal or international agencies or input from scholarly research results.

164 A recent case in point was as a result of the watering restrictions which would be implemented if
165 the board were to declare a stage IV level of water shortage emergency. A proposal was submitted by
166 interested parties which requested an exemption for “fault tolerant grasses” from the limitations defined in
167 the Goleta Water District Code (Board of Directors, Goleta Water District, 2017).

168 An analysis of past meeting agendas shows that such requests to alter any of the policy
169 documents are not a regular consideration. Still this exhibits the democratic nature of the Goleta Water
170 District operation. The aforementioned proposal was discussed between the board members then tabled
171 for further discussion by the Water Management & Long Range Planning Committee sources (personal
172 observation from Goleta Water District monthly meeting, February 14, 2017).

173 **Conclusion**

174 The term “Local Resultant Set of Policies” (RSOP) is borrowed from the security paradigm
175 which is used by Microsoft in controlling a Windows information technology (IT) enterprise (usually
176 referred by the user community as “the network” or “the server”). In reality the system consist of any
177 number of servers, desktops, laptops, switches/routers, firewalls, et al. These are each referred to in IT
178 parlance as “objects” as well as user accounts and groups. The Group Policy Object (GPO) is a series of
179 settings which are defined to control what a user can do or what digital objects can be accessed and/or
180 manipulated. Different groups of policy settings are developed to apply to the various types of objects

181 such that a server object has a more robust security profile than a desktop or a standard user account has
182 fewer privileges than an administrative account (Microsoft, 2017).

183 High level GPOs are applied to all objects in the IT enterprise where as low level GPOs are
184 tailored to apply to only specific types of objects. The same basic principle is at work for virtually any
185 organizational system where there are various levels of authority. There are high level requirements that
186 apply to all and low level requirements that are tailored for each specific local context. The
187 conglomeration of these policies is then applicable to the lowest level of the system; hence my use of the
188 concept of the RSOP.

189 The Goleta Water District is the lowest level of authority applicable to its local water customers.
190 Yet there are policies which descend from the Federal, California State and Santa Barbara County entities
191 whose purview includes water issues. There are basic policies which include water quality for potable
192 user (CalEPA, 2016), and specific policies such as installation and operation of desalination plants or
193 processing and uses of recycled water (CalEPA, 2012).

194 Though agricultural water use is mentioned at each level of authority (CalEPA, 2013, P.1), there
195 is no focus on behalf of these that would reduce the prospect of bankrupting conditions. Therefore,
196 without additional special consideration the chance of significant hardship coming upon this small a
197 voiceless group is great. The fact that the GWD board was lenient in the implementation of the shortage
198 stage requirements, applicable to the agricultural community, indicates that they are aware of the
199 precarious state of this set of their customers and perhaps the value of its contribution that belies its
200 apparent quiet significance (Stumbos, 1993). In the main the policy soma looks at the agricultural
201 community as a homogenous whole. There are regulations for how much of what kind of waste can be
202 discharged that could affect water quality (CalEPA, 2016) including siting, design, operation and
203 maintenance of wastewater treatment systems (CalEPA, 2012). There is a definition of the entities which
204 regulate irrigation systems (USEPA, 2002). The Safe Water Act also Gives the US Secretary of
205 Agriculture the power to determine new and improved methods for mitigating or minimizing the pollution
206 of the various elements of the US hydrologic systems (USEPA, 2002).

207 This is a small sample of the regulatory edicts which apply to all agricultural operations. Yet in
208 all of the myriad policies there is no element of scale which might preclude the loss of a small scale crop
209 farmer's livelihood whereas the large scale agribusinesses, as a result of economy of scale, would easily
210 survive.

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Appendix A

Policies:

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