LEGAL ANALYSIS OF SONOMA COUNTY'S GROUNDWATER SUPPLY AND THE ADVERSE AFFECT OF FEDERALLY RESERVED WATER RIGHTS.

I. INTRODUCTION

An extremely large development project (Indian casino and hotel/retail center) is slated for an identified region of Sonoma County where groundwater supplies are already being critically overdrafted. *Clearly, a sufficient and sustainable water supply does not exist for the project*, particularly in light of the region's prevailing water crisis and the current and future water needs of local residents. For that reason alone, the project should not be allowed to proceed. However, the Casino project's sovereign status would make matters even worse. For instance, the project may seek to ignore state environmental protection laws and local water management efforts and, in the event of groundwater litigation, the project could unjustly obtain priority over longstanding water rights held and relied upon by local landowners, cities, water agencies, and the County.

For these and other reasons discussed below, the O.W.L. Foundation (Open Space, Water Resource Protection, Land Use) ("O.W.L.") urges that the Casino project should be denied.

II. BACKGROUND

O.W.L. is a non-profit organization headquartered in the community of Penngrove, Sonoma County, California. O.W.L.'s membership is comprised of residents throughout Sonoma County, including residents of Penngrove, who understand that immediate steps must be taken to avoid a disastrous outcome for one of their County's most precious resources – water – groundwater in particular.

Penngrove is situated in the valley floor west of the Sonoma Mountains, roughly between the City of Rohnert Park, to the North, and the City of Petaluma, to the South. Like many communities of Sonoma County, Penngrove has historically relied on local groundwater, including the Santa Rosa Plain Groundwater Basin, to provide a reliable water supply for its residents and agricultural industry. (See Attachment A.) However, in connection with the last two decades of increased urbanization in Sonoma County, that once reliable groundwater supply has been drastically overproduced and woefully undermanaged. In fact, federal, state, and local water agencies have all found that Sonoma County's groundwater resources are in serious jeopardy. Surface water supplies available to the County are equally strained, and a recent Court of Appeal

decision confirmed that Sonoma County's water supply problem extends far beyond any quick-fix.

Notwithstanding this undeniable state of affairs, which could easily result in a complete public fiasco, the Sonoma County Water Agency, the County Board of Supervisors, and various municipalities have turned a blind eye to the County's water crisis and have determined to proceed with a host of new projects – including the Casino project – *without* being able to demonstrate that a sufficient, reliable, and sustainable water supply exists for those projects in light of the County's current and future water needs. (See pp. 12-13, below, regarding the proposed Casino project.)

III. WATER RESOURCE MANAGEMENT IS A PUBLIC RESPONSIBILITY

O.W.L. has stepped in and asked these public agencies to take a hard look at the consequences of their actions. For years, O.W.L. members have attended town hall forums, commission meetings, and city council hearings to voice their concerns about the looming water scarcity and about the impacts that local decision-making has on Countywide water resource management. O.W.L. has consistently presented an abundant variety of undisputable facts about existing and worsening conditions of groundwater basin overdraft and overall County water supply. (The entirety of reports, charts, maps, diagrams, and other relevant water supply information submitted by O.W.L. are not included with this letter, yet copies of that information can be provided upon request.)

A. Existing Groundwater Overdraft Must be Addressed and Resolved

1. Basin Overdraft is a Serious Problem

Groundwater basin overdraft occurs when the rate at which groundwater is produced from a basin exceeds the average annual amount by which the basin is replenished by rainfall and percolation from other natural water sources. Overdraft is often defined as the condition resulting from the continual lowering of the level and gradual reducing of the total amount of stored water, the accumulated effect of which, after a period of years, renders the supply insufficient to meet the needs of the public. Prolonged overdraft can cause numerous long-term detrimental economic and environmental impacts. When a groundwater basin is in overdraft, groundwater users must often deepen their wells and install more powerful pumps to extract a sufficient supply of water from ever-greater depths of the basin. To that end, overdraft can also

result in land subsidence, loss of surface vegetation and wetlands habitat, and severe degradation of groundwater quality. Perhaps most notably, however, overdraft causes injury to existing water rights and often leads to complicated and protracted litigation to adjudicate a basin's water supply.

2. Areas of Natural Recharge Must Be Protected

Groundwater overdraft can be corrected by taking steps to replenish a depleted basin and protect areas of natural recharge. For the most part, groundwater basins are recharged by natural percolation, where rainfall and other waters are allowed to collect and percolate down into the basin. This process typically occurs through stream beds or areas of open space with porous soil know as "areas of natural recharge." When areas of natural recharge are developed and covered by buildings, streets, sidewalks, and other non-permeable surfaces, natural basin replenishment cannot occur and groundwater overdraft is exacerbated. Once the recharge areas are gone, they cannot be replaced.

3. O.W.L. has Shown that Severe Overdraft Exists in the County and that Areas of Natural Recharge are Being Lost at an Alarming Rate

O.W.L. members have used publicly available information to show the County, the County Water Agency, and local municipalities that the Santa Rosa Plain Groundwater Basin and other adjoining groundwater basins are seriously overdrafted and further threatened by the continual loss of areas of natural recharge.

With regard to overdraft, O.W.L. has pointed to reports prepared by these agencies' own consultants to show the extent of the County's groundwater crisis. For example, in the southern portion of the Santa Rosa Plain Groundwater Basin encompassing the cities of Rohnert Park, Cotati, and northern Penngrove (Attachment B), annual recharge is approximately 1.6 million gallons per day ("mgd"), yet annual production in that area exceeds 5.0 mgd. This drastic overdraft of the basin has caused local groundwater levels to drop by as much as 150 feet. (See Attachments B and C.)

Indeed, in 2002, the Sonoma County Water Agency pumped 5.4 mgd from three nearby "emergency wells" (enough to supply about 30,000 urban customers) even though the Agency has not declared that any emergency exists. Even worse, the Agency produces this groundwater from rural areas of Sonoma County and sells and exports a

substantial portion of that water to fuel urban growth in Marin County. As a result, rural Sonoma County residents near Sebastopol are beginning to voice concerns that numerous recent dry wells in their area are being caused by the Agency's excessive pumping from the "emergency wells."

Information published by the State Department of Water Resources ("DWR") clearly supports the conclusion that the region has fallen into serious overdraft. DWR indicates that the annual rate of groundwater production in the Santa Rosa Plain between 1960 and 1975 was *barely* in balance with the rate of groundwater replenishment for that same period (which is consistent with the City of Rohnert Park's EIR assessment for its General Plan, above; See Attachment C, Figure 4.10-2.) Similarly, as early as 1972, the United Stated Geological Survey ("USGS") characterized the majority of the Sonoma County groundwater basin complex as "marginal" or "inadequate" for municipal uses. However, by 1999, the City of Rohnert Park had increased its groundwater production to an annual average of 4.3 mgd in the Santa Rosa Plain Groundwater Basin, while recharge remained unchanged at an average 1.6 mgd. (See Attachments B and C.) Moreover, in 2002, the Sonoma County Water Agency increased groundwater pumping in the same region from zero to 5.4 mgd.

Equally telling, the U.S. Department of the Interior ("DOI") recently published a map in May 2003 of the Western United States entitled "Potential Water Supply Crises by 2025." The map identifies areas were "existing supplies are not adequate to meet water demands for people, for farms, and for the environment." The DOI concludes that Sonoma County has a "substantial conflict potential" over water supplies and ranks the County's water resource crisis in the same category as the Klamath Basin, where farmers, tribes, and the federal and state government are locked in a bitter feud over limited water supplies and competing water rights.

With regard to areas of natural recharge, O.W.L. has pointed to maps prepared by DWR and USGS which specifically designate various lands in Sonoma County as being critical to groundwater recharge. The Sonoma County Planning Department uses these same maps to describe such lands as dedicated "areas of natural recharge." (See Attachment D.) The bed of the Russian River is also a key source of groundwater recharge for the County. Notably, DWR recently issued the following

statement as number 4 on its list of 10 "Major Recommendations" in its 2003 Bulletin 118 Update:

- Groundwater management agencies should work with land use agencies to inform them of the potential impacts various land use decisions may have on groundwater, and to identify, prioritize, and protect recharge areas.
- Local planners should consider recharge areas when making land use decisions that could reduce recharge or pose a risk to groundwater quality.
- Recharge areas should be identified and protected from land uses that limit recharge rates; such as paving or lining of channels.
- Both local water agencies and local governments should pursue education and outreach to inform the public of the location and importance of recharge areas.

O.W.L. advocates for responsible growth and adheres to the simple proposition that development and transformation of dedicated recharge lands prevents basin replenishment and substantially limits the amount of groundwater supply available for residents' existing and future needs.

B. A Key Community Group Successfully Litigated Against the City of Rohnert Park for the City's Failure to Adequately Assess Groundwater Impacts

A key community group (which evolved into O.W.L.) first stood ground in 2002 when it filed a lawsuit against the City of Rohnert Park for violating the California Environmental Quality Act ("CEQA") through its failure to adequately analyze the impacts that City's General Plan Update would have on groundwater resources. The lawsuit resulted in a stipulated judgment which restricts the City's land use approvals in relation to existing overdraft conditions. For instance, the Judgment requires that any CEQA document prepared by the City for a project located outside of its 1999 boundaries must include (1) a determination of the project's water demand, (2) an analysis of whether the total projected water supplies available to the City during normal, dry, and multi-dry years during a 20-year projection will meet the projected water demand associated with the project, and (3) an identification of the water supply that is proposed to serve the project. The City is also prohibited from approving any project

outside its 1999 boundaries whose net consumptive water use impact on the City's water supply will contribute to the City exceeding an average annual groundwater pumping rate of 2.3 mgd (half of the City's mean pumping rate between 1984 and 1999.) Notably, even this amount of groundwater production is at odds with the City's own General Plan concept of "safe yield" which clearly recognizes that the groundwater subbasin is only replenished at the average rate of 1.6 mgd.

Further, the 2002 Judgment required the City to amend its sphere of influence to remove 170 acres of land within the Penngrove Specific Plan that were previously added to the City's sphere. The City had intended to re-zone those lands from one home per 20 acres (which would still permit natural groundwater recharge) to various new zoning designations that would allow high density residential, commercial, and industrial development (which would transform the open permeable soil to impermeable hardscape and prevent groundwater recharge).

C. O.W.L. Convinced Sonoma County Representatives to Include Key Water Management Objectives and Policies in the County's General Plan Update

In 2003, O.W.L. participated in the public review process conducted by a Sonoma County Citizens Advisory Committee ("CAC") to accept comments on and develop a draft "Water Resources Element" for the County's General Plan Update for the year 2020. While that process is still underway, O.W.L. was instrumental in guiding the CAC to develop key policies and objectives that are protective of existing groundwater resources and recharge lands and aimed toward responsible management of water resources generally on a Countywide basis. Some of the more critical provisions of the Water Resources Element are:

- The general objective of using only sustainable water supplies to satisfy future growth.
- The general objective of protecting existing recharge areas.
- The policy of denying discretionary development applications if cumulative development will cause or exacerbate groundwater overdraft.
- The policy of requiring study of proposed development projects and their potential impact on overdraft, land subsidence, and saltwater intrusion.

IV. A SERIES OF RECENT DEVELOPMENTS HIGHLIGHT SONOMA COUNTY'S CONTINUING WATER CRISIS

Numerous recent developments illustrate that the water resource crisis in Sonoma County has finally come to a head.

A. The Eel River Decision

In a May 2003 decision, the First District Court of Appeal held that the Sonoma County Water Agency did not comply with CEQA and overturned an EIR that the Agency prepared for its Water Supply and Transmission System Project to divert additional water from the Russian River for distribution to Sonoma County cities and other water purveyors. The Court determined that the Agency failed to account for a possible loss of Russian River water that may occur if PG&E's pending application to divert less water from the Eel River for its hydroelectric power plant is granted by a federal agency. Since such water diverted from the Eel River, in turn, feeds into the Russian River, less water will be available in the Russian for the Agency to take and distribute if PG&E takes less water from the Eel River.

The Court of Appeal stated that "[Sonoma County Water Agency's] failure to consider the impact of the potential curtailment of water from the Eel River has resulted in an EIR that fails to alert decisionmakers and the public to the possibility that the Agency will not be able to supply water to its customers in an environmentally sound way." As a result of the Eel River decision, the Agency's plans to divert additional surface water from the Russian River are indefinitely on hold.

B. The Sonoma County Water Agency Admits that it Does Not Have an Adequate 20-Year Supply

In response to the Eel River decision, the General Manager for the Sonoma County Water Agency issued a letter in August 2003 stating that water suppliers (including local municipalities) that have contracts to receive water from the Agency should not rely on the delivery estimates contained in the Agency's 2000 Urban Water Management Plan, which indicated that water supplies available to the Agency would be adequate over the next 20 years. Unfortunately, many of the local municipalities had already approved development projects and land use plans in reliance on the information contained in the 2000 Urban Water Management Plan. In light of requirements under

California's new water supply laws (SB 221 and SB 610; *See discussion below*), the Agency also issued the following admonishment:

> "[M]anagers of all public water systems relying on water diverted under the Agency's water rights must work together with local planning agencies to determine the extent to which additional supplies are available to each system for proposed new developments, given existing demand, existing approved development, the water remaining under the Agency's 75,000 afy limit and other supplies that each public water supplier may have available." [The Agency's delivery estimates before the Eel River decision were set in excess of 100,000 afy.]

The Agency also recommended that each water purveyor take certain steps to provide a meaningful assessment and monitoring of water demand, including: (1) immediately evaluate the expected future water demands for existing and approved development projects and provide the Agency and other Agency contractors with that information; (2) identify the source of water for those projects; and (3) evaluate the future water demands anticipated from proposed, but not yet approved, development projects.

Clearly, this admission by the largest surface water supplier in Sonoma County that it does not have a sufficient 20-year supply means that municipalities and water purveyors will look to increased groundwater production to serve the growth that may have already been sanctioned under local general plan processes. However, as set forth above, that groundwater supply is already overdrafted.

C. The County of Sonoma Permit and Resource Management Department has Acknowledged Existing Groundwater Overdraft

In November 2002, the County's Permit and Resources Management Department ("PRMD") determined that unmitigated groundwater impacts would be caused by a particular development project proposed by the City of Rohnert Park. PRMD disapproved of the proposed project on three separate grounds, including:

- The water balance shows that this portion of the Santa Rosa Basin is in overdraft (recharge is estimated at 1900 afy, the City of Rohnert Park is removing 5,040 afy, and this project may remove as much as 193 afy).

- The estimated overdraft situation is confirmed by the City of Rohnert Park's General Plan 2000 which acknowledges a lowering of the water table in this area by 100 to 150 feet. (See Attachments B and C.)
- The Revised Rohnert Park General Plan speculation that the City will reduce its groundwater removal by up to 50% is unsupported by purchase contracts for more imported surface water.

These comments clearly illustrate the disharmonious relationship between the Eel River decision, the admission by Sonoma County Water Agency that available surface water supplies will be less than anticipated, and the looming trend by local municipalities to further rely on an already overdrafted groundwater supply.

D. The Kleinfelder Report

In September 2003, the "Kleinfelder Report" was issued. The Report was commissioned by the County Board of Supervisors and confirmed the long-foregone conclusion that particular study areas of the County's groundwater basin complex are experiencing serious water scarcity. The Kleinfelder Report concludes, in part, that "[a]dditional groundwater extraction is likely to increase the rate of overdraft and result in further decline of the groundwater levels. … Levels will continue to drop as long as extraction exceeds recharge."

PRMD reported to the County Board of Supervisors that the findings in the Kleinfelder Report will need to be considered in connection with any new discretionary applications in the study areas (e.g., subdivisions or use permits) because "at a minimum, the Report will constitute 'substantial evidence' under CEQA that a cumulative groundwater impact may exist …"

V. VARIOUS WATER MANAGEMENT TOOLS ARE AVAILABLE TO ALLEVIATE THE COUNTY'S WATER CRISIS

While California does not have a statewide regulatory system for surface and groundwater management, various methods are available to protect and preserve those resources, including new water supply legislation, groundwater ordinances, and water management plans. If used properly, these tools can address and alleviate the water crisis in Sonoma County.

A. SB 221 and SB 610 Promote "Responsible Growth"

Effective since January 2002, California's water supply laws (commonly referred to as SB 221 and SB 610) impose strict requirements on certain development projects. Generally, projects subject to SB 221 and SB 610 are those containing 500 or more residential dwelling units, commercial or industrial projects that fall within certain size parameters, and projects that would have a water demand equivalent to a residential development project with 500 units or more.

In general, for any project subject to SB 221 and/or SB 610, the project cannot be approved unless the project proponent can provide verification from the local water purveyor that a sufficient water supply is available during normal, single-dry, and multiple-dry years within a 20-year projection that will meet the projected demand created by the project in addition to existing and planned future uses, including agricultural and industrial uses. Particularly relevant to Sonoma County, if the water supply for the proposed project includes groundwater, the purveyor must consider and analyze multiple factors concerning the condition of the supplying groundwater basin and its rights to extract such groundwater among other competing users.

B. Local Groundwater Ordinances Offer Solutions for Overdraft

Cities and counties in California have the authority to adopt groundwater ordinances pursuant to their police powers to protect the public, health, safety and welfare in areas that are not already regulated by the state. As California does not have a uniform groundwater regulatory scheme, nearly half of its counties, and many cities, have adopted local groundwater ordinances.

The general intent of groundwater ordinances is to protect and preserve the viability of the existing groundwater supply. To that end, many groundwater ordinances focus on restricting projects insofar as they may adversely affect groundwater supplies, propose to export groundwater outside of the basin or county boundaries, degrade groundwater quality, or cause land subsidence. However, other groundwater ordinances have a broader scope, and are also geared toward managing groundwater resources for existing needs and planned growth.

Ordinances are typically implemented in connection with groundwater extraction permits, and center on whether the basin is operating within its "safe yield."

Generally, safe yield is the amount of water that can be produced from a groundwater basin under a certain set of circumstances, over a given amount of time, without causing basin overdraft and without causing other adverse impacts.

O.W.L. has proposed the idea of using groundwater ordinances to the County Board of Supervisors, the County Water Agency, and various municipalities as a potential means of addressing and alleviating the impending water crisis in Sonoma County. To date, however, those agencies have not taken steps to craft or implement a new groundwater ordinance.

C. Groundwater Management Plans Can Harmonize Countywide Efforts to Preserve and Protect Water Resources

In 1992, the State Legislature adopted the "Groundwater Management Act" which is commonly referred to as AB 3030. (The Act is set forth by California Water Code Sections 10750 to 10755.4.) AB 3030 begins with the following proclamation by the Legislature concerning the protected status of groundwater:

> "The Legislature finds and declares that groundwater is a valuable natural resource in California, and should be managed to ensure both its safe production and its quality. It is the intent of the Legislature to encourage local agencies to work cooperatively to manage groundwater resources within their jurisdictions."

A groundwater management plan under AB 3030 may be adopted by any local agency, including municipalities, that provides water service, flood control, groundwater management, or groundwater replenishment. Pursuant to AB 3030, groundwater management plans address a wide range of management issues, including, but not limited to: (a) controlling saline water intrusion; (b) identifying and managing wellhead protection areas and groundwater recharge areas; (c) regulating migration of contaminated groundwater; (d) administering well abandonment and well destruction programs; (e) mitigating the effects of groundwater overdraft; (f) replenishing groundwater extracted by producers; (g) monitoring groundwater levels and water storage; (h) facilitating conjunctive use operations; (i) identifying well construction policies; (j) constructing and operating groundwater contamination cleanup, recharge, storage, conservation, recycling, and extraction projects; (k) developing relationships

with state and federal regulatory agencies; and (l) reviewing land use plans and coordinating with land use planning agencies to assess activities that create a reasonable risk to groundwater resources and management.

O.W.L. has strongly advocated for the Somona County Water Agency to develop and implement a groundwater management plan. Recently, as part of its process to restructure the entitlement contracts to Lake Sonoma water in response to the Eel River decision, the Agency has more openly acknowledged the need to prepare such a plan. However, successful water management requires cooperation and "buy in" from surrounding agencies concerning efforts to moderate water production and conserve resources. That type of approach could easily be scuttled by the proposed Casino project.

VI. THE PROPOSED CASINO NEAR THE CITY OF ROHNERT PARK CONTRAVENES ALL ABOVE-MENTIONED PRINCIPLES OF WATER RESOURCE MANAGEMENT

Now that O.W.L. and other concerned members of the public are beginning to make progress with County and local decision-makers regarding water resource management, a new proposal is being made to locate a Las Vegas-style Indian gaming casino and hotel/retail complex just outside the city limits of Rohnert Park. Aside from the environmental impacts that this project would cause to various other County resources (i.e., wetlands, endangered species, growth inducing impacts), the proposed Casino would drive a galvanized nail into the coffin of Sonoma County's water supplies.

Under federal case law (the "Winters Doctrine"), when an Indian reservation is established, "federally reserved water rights" attach to the reservation land for purposes of supporting the purposes and livelihood of the Indian Nation for which the reservation was created. The Winters Doctrine illustrates that federally reserved water rights enjoy powerful priority over pre-existing, state-based rights, and are protected against loss, interference, or injury. Indian water rights are protected pursuant to the trust relationship that exists between the federal government and Indian Nations. The federal government has an affirmative duty to protect the viability of these water rights and is subject to liability for failure to do so. Examples exist statewide of multi-million dollar

settlements in favor of claims by Indian Nations that injury has been caused to their federally reserved water rights.

In light of the foregoing, serious implications could arise from the establishment of federally reserved water rights in the Sonoma County groundwater basin system. Given the groundwater overdraft and surface water problems that already prevail in the southern portion of the Santa Rosa Plain Groundwater Basin (*see discussion above*; Attachments B and C), those federally reserved rights would further jeopardize the ability of existing landowners and water purveyors to exercise their water rights. For instance, the well-documented overdraft in the Rohnert Park area already contributes to degradation to local water quality and has required surrounding water users to drill deeper wells. Water extracted for the Casino project would only magnify those problems. Moreover, overdraft conditions may result in a groundwater adjudication, where rights to produce groundwater now and in the future would be divided among landowners, cities, and other water agencies according to legal priority. Given the heightened priority that is afforded to federally reserved water rights, local landowners and agencies that have relied upon County groundwater for generations could be subject to enormous and irreparable harm.

In addition to those concerns, an Indian Nation would not likely be required to comply with CEQA, SB 221 and SB 610, a locally enacted groundwater ordinance, or a groundwater management plan due to its status as a sovereign nation. Thus, despite whatever solutions may be crafted to address the County's water resource crisis, the Casino could be permitted to turn a blind eye and continue groundwater production, depletion, and mismanagement of the local groundwater basin.

As the Casino proposal is first dependent on the project site being designated as federal reservation land, O.W.L. has advocated for strict environmental review under the National Environmental Policy Act ("NEPA"), which applies to federal discretionary decisions that may "significantly affect the human environment." O.W.L. has argued that, at a minimum, the factors of (1) a critically overdrafted groundwater basin, (2) the Countywide surface water limitations under the Eel River decision, (3) the current Williamson Act designation of the proposed Casino site, and (4) the existence of

multiple endangered species issues at the proposed site give rise to the need for thorough federal NEPA review before the proposed site is designated as a federal reservation.

VII. CONCLUSION

Many other groups and local citizens are objecting to the proposed Casino project on various legal, social, and environmental grounds. While supporting and concurring with many of those objections, O.W.L. is focused on the key point that any invitation to create a federally reserved water right in the local, overdrafted basin is an ill-conceived idea that would exacerbate the existing water crisis and contravene the water-related interests of the County, its cities, and all Sonoma County residents.