STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

DECISION 1639

In the Matter of Application 29664 of
Garrapata Water Company:
Extraction of Water by Garrapata Water Company
From the Alluvium of the Valley of Garrapata Creek
in Monterey County, California

GARRAPATA WATER COMPANY,
Applicant,

DEPARTMENT OF FISH AND GAME,
Protestant,

STATE WATER RESOURCES CONTROL BOARD PERMITTING TEAM,
Interested Party

SOURCE: Garrapata Creek Subterranean Stream

COUNTY: Monterey

DECISION DETERMINING THAT WATER IN THE ALLUVIUM OF THE VALLEY OF GARRAPATA CREEK IS A SUBTERRANEAN STREAM AND THAT APPLICATION 29664 IS NOT EXEMPT FROM THE CALIFORNIA ENVIRONMENTAL QUALITY ACT

BY THE BOARD:

1.0 BACKGROUND

On October 13, 1998, the Monterey County Superior Court entered a judgment granting a peremptory writ of mandate in Garrapata Water Company, Inc. v. State Water Resources Control Board, case number M 39441 (judgment). The judgment required the State Water Resources

Control Board (SWRCB) to hold a hearing regarding the SWRCB's authority to issue a permit for the appropriation of water from the alluvium of the valley of Garrapata Creek by the Garrapata Water Company (Company). The judgment allows the inclusion of other issues in the hearing. On February 1 and 2, 1999, the SWRCB held a hearing to comply with the judgment.

2.0 HEARING ISSUES

On October 28, 1998, the SWRCB issued a Notice of Hearing. The Notice of Hearing contained the following issues:

"1. At the point of diversion by the Company, is the water in the alluvium of the valley of Garrapata Creek part of a subterranean stream flowing through a known and definite channel?

"2. Is the Company's project exempt from the California Environmental Quality Act (CEQA)?

A. Is this an ongoing project?

i. What prior approvals have been issued for the project?

ii. To what extent did the approvals review and exercise oversight and control over the project as a whole?

B. Does the project qualify for a categorical exemption? If so, which one(s) and why?

i. Is this project exempt as an existing facility?

a. How much water was the Company extracting from the alluvium of the valley of Garrapata Creek prior to the enactment of CEQA?

b. How much water is the Company extracting from the alluvium of the valley of Garrapata Creek at the present time?

c. How much water does the Company intend to extract from the alluvium of the valley of Garrapata Creek in the future?

ii. Does this project have the potential to adversely affect threatened or endangered species?"

3.0 LEGAL CLASSIFICATION OF GROUNDWATER EXTRACTED BY THE COMPANY

3.1 Applicable Law

The California Water Code defines the water that is subject to appropriation and is thus subject to the SWRCB's permitting authority. Water Code section 1200 states:

> "Whenever the terms stream, lake or other body of water occurs in relation to applications to appropriate water or permits or licenses issued pursuant to such applications, such term refers only to surface water, and to subterranean streams flowing through known and definite channels." (Emphasis added.)

Groundwater which is not part of a subterranean stream is classified as "percolating groundwater." The distinction between subterranean streams and percolating groundwater was set forth by the California Supreme Court in 1899 in *Los Angeles* v. *Pomeroy* (1899) 124 Cal. 597 [57 P. 585]. In *Los Angeles* v. *Pomeroy*, the court stated that it is undisputed that subterranean streams are governed by the same rules that apply to surface streams. (*Id.* at 632 [57 P. at 598].) Percolating groundwater is not subject to the Water Code sections that apply to surface streams. Thus, the SWRCB has permitting authority over subterranean streams but does not have permitting authority over percolating groundwater.

Absent evidence to the contrary, groundwater is presumed to be percolating groundwater, not a subterranean stream. (*Id.* at 628 [57 P. at 596].) The burden of proof is on the person asserting that groundwater is a subterranean stream flowing through a known and definite channel. (*Ibid.*) Proof of the existence of a subterranean stream is shown by evidence that the water flows through a known and defined channel. (*Id.* at 633-634 [57 P. at 598].) In *Los Angeles* v. *Pomeroy*, the court stated:

> " 'Defined' means a contracted and bounded channel, though the course of the stream may be undefined by human knowledge; and the word 'known' refers to knowledge of the course of the stream by reasonable inference." (*Id.* at 633 [57 P. at 598].)

A channel or watercourse, whether surface or underground, must have a bed and banks which confines the flow of water. (*Id.* at 626 [57 P. at 595].) Although in *Los Angeles* v. *Pomeroy* the

court stated that the bed and banks of a subterranean stream must be impermeable[1] (*Id.* at 631 [57 P. at 597]), all geologic materials are permeable to some degree. Therefore, if the rock forming the bed and banks is relatively impermeable compared to the aquifer material filling the channel, a subterranean stream exists.

In summary, for groundwater to be classified as a subterranean stream flowing through a known and definite channel, the following physical conditions must exist:

1. A subsurface channel must be present;
2. The channel must have relatively impermeable bed and banks;
3. The course of the channel must be known or capable of being determined by reasonable inference; and
4. Groundwater must be flowing in the channel.

3.2 Physical Setting

The Garrapata Creek watershed is located in Monterey County about 10 miles south of the city of Carmel. The watershed is approximately 10 square miles in area and includes two main tributaries to Garrapata Creek, Joshua Creek and Wildcat Canyon. Garrapata Creek is a perennial stream. The average annual outflow of surface water to the Pacific Ocean from the Garrapata Creek watershed was estimated by Division of Water Rights staff to be 4,668 acre-feet. (Permitting Team Exhibit S, p. 8.) The Company's expert witness, Dr. Nick Johnson, estimated the average annual discharge to be 5,000 acre-feet. (Company Exhibit 17, p. 3.)

The Company has a water supply well located near the mouth of the creek, about 1500 feet upstream from the Pacific Ocean. (Company Exhibit 17, p. 1.) The well site is the only point of diversion for the Company's water supply system. Another well is connected to the Company's conveyance system, but has not been used since 1990 or 1991 and has no power supply. The Company's attorney and agent, Mr. Donald Layne, testified that the well is not being used but it has not been capped. (TI, 24:14-25:17.)

[1] The term used in *Los Angeles* v. *Pomeroy* is "impervious," a synonym for "impermeable." The latter term is used more commonly in scientific literature and the SWRCB will follow this convention.

From the Company's point of diversion eastward, the watershed is underlain entirely by crystalline bedrock of granitic composition. Having a granitic composition means that the mineral crystals composing the rock are principally quartz, feldspar, amphibole and mica. The Permitting Team's expert witness, Mr. Thomas Peltier, observed and described the granitic bedrock in Garrapata Creek canyon. According to Mr. Peltier, on the north side of the canyon, the granitic bedrock is hard and dense with moderate weathering. On the south side of the canyon, where exposed, the bedrock is more weathered, with many of the feldspar minerals altering to clay. The bedrock slopes are mantled with a relatively thin layer of loose rock and debris (called "colluvium") and soil. (Permitting Team Exhibit B1, p. 2.) Mr. Peltier estimated the thickness of the zone of weathered bedrock, colluvium and soil to be about 20 feet or more on the south side of the canyon, and a little less than 20 feet on the north side of the canyon. (TII, 285:25-286:7.)

West of the point of diversion, the bedrock changes to a sedimentary rock that Mr. Peltier described as marine sandstone. (Permitting Team Exhibit B1, p. 2; and J.) Because this unit is not relevant to the classification of groundwater at the Company's point of diversion, the marine sandstone will not be discussed further.

The canyons carved into the granitic bedrock by Garrapata Creek and its tributaries are steep and deeply incised. This feature is evident in several photographs submitted by the Department of Fish and Game (DFG) and the Permitting Team. (DFG Exhibit 2a, photographs 1 and 2; DFG 7, 4th photograph; Permitting Team Exhibits E and F.) In the canyon bottom is an unconsolidated deposit of cobbles, gravel, sand and clay eroded from the bedrock and lain down by Garrapata Creek. The technical term for this type of unconsolidated deposit is "alluvium." At the point of diversion, the alluvium is at least 40 to 50 feet thick (Permitting Team Exhibit B1, p. 3; Company Exhibit 17, p. 3.) The Company's well produces groundwater from the alluvium, and is reported to operate at a rate of 50 gallons per minute. (Company Exhibit 17, p. 3.) Recharge is the technical term for the processes through which the alluvium becomes saturated with water. Recharge also refers to the amount of water added to the saturated zone in the alluvium. The alluvium in the Garrapata Creek watershed is recharged through several processes

including: (1) percolation of water through the soil and colluvium covering the bedrock slopes, (2) percolation through the shallow zone of weathered bedrock beneath the colluvium, (3) percolation through fractures in the bedrock beneath the shallow weathered zone, and (4) infiltration of surface water from Garrapata Creek.

3.3 Discussion

3.3.1 Relationship of the terms "Subterranean Stream Flowing Through a Known and Definite Channel" and "Underflow"

The Permitting Team and the Company disagreed on the definition of a subterranean stream. Mr. Peltier testified that two criteria are used to determine if groundwater is flowing in a subterranean stream: (1) is there flow, and (2) is the flow bounded by bed and banks. (Permitting Team Exhibit B1, p. 1.) This definition is consistent with the applicable law discussed in section 3.1.

Dr. Johnson used the following definitions in his analysis of groundwater classification.

> "Groundwater is all subsurface percolating water not flowing in a known and definite channel. A stream's underflow is a subterranean stream flowing through a known and definite channel having identifiable beds and banks."
> (Company Exhibit 17, p. 1.)

Dr. Johnson's definition confuses the technical term of "groundwater," which is water below the surface of the ground, with the legal concept of percolating groundwater, which is groundwater not flowing in a subterranean stream. Further, he equates the concept of underflow of a surface stream with a subterranean stream. Finally, Dr. Johnson demonstrated his misunderstanding of the characteristics of a subterranean stream when he testified that a subterranean stream consists of a surface stream and the water beneath it. (TI, 70:14-22.)

A subterranean stream need not be interconnected with a surface stream. A subterranean stream, like a surface stream, is merely the flow of water in a defined channel whether or not the subterranean stream is interconnected with a surface stream. The additional characteristic of a subterranean stream is that the subsurface channel through which it flows must have relatively impermeable bed and banks compared to the material filling the channel. Thus, Dr. Johnson's

evidence concerning the interconnection of the groundwater in the alluvium with the surface flow of Garrapata Creek is immaterial to the legal classification of the groundwater.

Although not the subject of this hearing, Dr. Johnson introduced the term "underflow" in his written and oral testimony. The definition of underflow is included here to clarify the difference between the legal concepts of underflow and subterranean streams. Underflow was defined in *Los Angeles* v. *Pomeroy* as having the following physical characteristics:

1. Underflow must be in connection with a surface stream;
2. Underflow must be flowing in the same general direction as the surface stream; and
3. Underflow must be flowing in a watercourse and within a space reasonably well defined. (124 Cal. at 624 [57 P. at 594].)

The relationship between subterranean streams and underflow is that both must flow in a watercourse. A watercourse must consist of bed, banks or sides, and water flowing in a defined channel. (*Id.* at 626 [57 P. at 595].) Thus, underflow is a subset of a subterranean stream flowing in known and definite channels. While a subterranean stream includes underflow, it is not necessary that groundwater be underflow to establish the existence of a subterranean stream flowing through a known and definite channel.

3.3.2 Existence of a Subterranean Stream Flowing Through a Known and Definite Channel

Other than any confusion that may have been created by the parties' use of different definitions, their evidentiary presentations leave no room for argument as to whether three of the four elements of the test for a subterranean stream flowing through a known and definite channel have been established. A subsurface channel is present; the course of the channel is known or capable of being determined by reasonable inference; and groundwater is flowing in the channel. Based on the evidence presented, the SWRCB concludes that the fourth element, that the bed and banks be formed by relatively impermeable materials, has been established.

Mr. Peltier testified that the two sloping sides of the canyon meet at some depth beneath the alluvium, forming a channel. The location and limits of this channel can be inferred by projecting

the slope of the walls of the canyon to their intersection beneath the alluvium. (Permitting Team Exhibit B1, p. 3.) The two canyon walls project into the subsurface, forming the banks of the channel. The intersection of the two sides form the bed of the channel. The Company did not dispute the Permitting Team's conclusion that a subsurface channel exists in the Garrapata Creek watershed.

Both the Permitting Team and the Company testified that groundwater flows through the alluvium. According to Mr. Peltier:

> "Groundwater within the alluvium flows under the force of gravity, within the channel formed by the sloping walls of the canyon, toward the ocean, in the same fashion as the surface flow in Garrapata Creek, though moving with much less velocity than the surface stream." (Permitting Team Exhibit B1, p. 3.)

Dr. Johnson also testified that groundwater flows within the alluvium. (TI, 43:12-13.) Accordingly, the SWRCB finds that a subsurface channel exists, that the channel has definite bed and banks, and that there is groundwater flowing within the alluvium deposited in the channel.

Thus, whether the groundwater in the alluvium of Garrapata Creek should be classified as a subterranean stream flowing through a known and definite channel at the Company's point of diversion hinges on whether the granitic bedrock is sufficiently impermeable to bound the flow of groundwater. Put another way, is the granitic bedrock sufficiently impermeable at the point of diversion to prevent the transmission of all but relatively minor quantities of water through the channel boundary. All naturally occurring earth materials have some intrinsic permeability. Thus, the test of a subterranean stream is not that the bed and banks be absolutely impermeable, but rather, relatively impermeable compared to the alluvium filling the channel. This is a subjective test, as no SWRCB decisions or appellate court decisions have quantified the difference in permeability between bedrock and alluvium needed to establish a subterranean stream. Additionally, the condition of impermeable bed and banks must be shown to exist only in a reach that includes the point of diversion, not necessarily throughout the entire length of the alluvial aquifer.

Mr. Peltier testified that the granitic bedrock is relatively impermeable to groundwater flow. He testified that the alluvium was recharged principally through the shallow percolation of rainfall through the zone of weathered bedrock, colluvium and soil, and through infiltration from surface flow in Garrapata Creek. (Permitting Team Exhibit B1, p. 3.) Mr. Peltier argued that the granitic bedrock is relatively impermeable and forms the bed and banks of a subterranean stream along its contact with the alluvium. (Permitting Team Exhibit B1, p. 4.) Based on published literature regarding typical aquifer characteristics of alluvium and granitic rock, on his observations made during a field investigation on August 12, 1997, and on information in water well driller's reports for wells in the Garrapata Creek watershed, he concluded that the granitic bedrock is relatively impermeable compared to the alluvium both at the point of diversion and throughout the watershed.

Mr. Peltier provided the following information about typical aquifer characteristics of granitic rocks. All granitic rocks consist of interlocking mineral crystals. Most crystalline rocks have no voids or pores between the mineral crystals. Thus, the only porosity these rocks contain is imparted through joints and fractures. Granitic rocks generally have poor permeability because the joints and fractures tend to be shallow, narrow, sometimes clay-filled, of limited extent, and not interconnected over large areas.

Mr. Peltier's testimony is supported by the Department of Water Resources Water Facts Number 1 entitled "Ground Water in Fractured Hard Rock." (Permitting Team Exhibit M.) According to this publication:

> "About 60 percent of California is composed of hard rocks. However, only a small quantity of ground water is stored in the fractures of these rocks. The majority of ground water is stored in what the average person would call "dirt" or "soil," more accurately described as alluvium, which has pore spaces between the grains. (Permitting Team Exhibit M, p. 1.) The volume of water stored in fractured hard rocks near the surface is estimated to total less than 2 percent of the rock volume. This percentage decreases with depth as fractures become narrower and farther apart." (Permitting Team Exhibit M, p. 3.)

Alluvium has a much higher permeability than granitic rocks because the porosity of alluvium is higher and the pore spaces are interconnected over large areas. This statement is supported by the U.S. Geological Survey's report entitled "Basic Ground-Water Hydrology." (Permitting Team Exhibit C.) This report lists the typical specific yields of granite versus unconsolidated sand and gravel. The specific yield of a material is the amount of water that will drain out of a unit volume under the influence of gravity. The typical specific yields of sand, gravel and granite are listed as 22 percent, 19 percent, and .09 percent respectively.

Based on his field investigation, Mr. Peltier testified that the general characteristics of granitic rocks and alluvium described above were true for the granitic bedrock and alluvium at the point of diversion and throughout the Garrapata Creek watershed. Mr. Peltier described the bedrock as hard and dense, a description that is consistent with the samples he collected and offered into evidence. (Permitting Team Exhibits G and H.) Mr. Peltier reported that the bedrock exhibited a network of intersecting joints spaced about 6 to 12 inches apart. Mr. Peltier also observed a small fault in the bedrock. A geologic fault is a fracture or fracture zone along which there has been displacement of the sides of the fracture relative to one another.

Mr. Peltier concluded that these joints and fractures were unlikely to impart significant permeability to the bedrock because they were narrow and filled or partially filled with clay. Clay fillings in joints and fractures can result either from the weathering and breakdown of feldspar minerals into clay minerals, or by the pulverization of rock along the moving surfaces of a fault. As discussed above, Mr. Peltier stated that these openings are likely to become smaller and farther apart with increasing depth. (Permitting Team Exhibit B1, p. 4.)

Mr. Peltier testified that the low yields and low specific capacities of wells in the granitic bedrock also support a conclusion that the bedrock is relatively impermeable compared to the alluvium. The specific capacity of a well is equal to the yield of the well (gallons per minute) divided by the drawdown of the water level in the well during pumping (feet). The units of specific capacity are gallons per minute per foot of drawdown. In general, the more permeable the aquifer material, the higher the specific capacity of the wells in the aquifer.

Based on information in State Water Well Drillers Reports, Mr. Peltier testified that the specific capacities of wells in the granitic bedrock were extremely low, ranging from 0.015 gallons per minute per foot of drawdown to a high of 0.28 gallons per minute per foot of drawdown. (Permitting Team Exhibit B1, p. 5.) Pumping and drawdown data were not available for the Company's well. However, based on his knowledge of typical values of specific capacity for alluvial wells, Mr. Peltier's opinion was that the specific capacity of the Company's well was likely to be several orders of magnitude higher than the specific capacities calculated for the granitic bedrock wells.

Based on these observations, Mr. Peltier formulated a conceptual model of the groundwater/surface water flow system that accounts for the dry season surface flow in Garrapata Creek. Because there is little rainfall in the Garrapata Creek watershed during the dry season, the flows of the creek are attributable to baseflow. The term "baseflow" refers to the portion of the flow in a surface stream that comes from the seepage (or discharge) of groundwater into the stream.

In Mr. Peltier's conceptualization, the dry season flow is sustained by the slow percolation of winter rainfall through the shallow zone of soil, colluvium and weathered bedrock into the alluvium, and eventually into Garrapata Creek. According to this model, infiltrated rainfall will percolate vertically through the permeable soil, colluvium and weathered bedrock until encountering the impermeable bedrock at depths of 10 to 20 feet. The infiltrated water then moves laterally along this low permeability boundary until entering the alluvium, or where the alluvium is absent, the creek, at the base of the slopes.

The Company presented testimony by Dr. Johnson in which he argued that the subterranean channel was not impermeable because the baseflow component of Garrapata Creek was so high that significant amounts of groundwater have to leak from the bedrock to recharge the alluvium and sustain the surface flow. (TI, 135:20-136:11.)

Dr. Johnson presented an alternate conceptual model of the groundwater/surface water flow system in the Garrapata Creek watershed, under which a different process is responsible for most of the recharge to the alluvium in the stream channel and subsequent baseflow to Garrapata Creek. Dr. Johnson testified that the principal process of recharge to the alluvium was deep percolation of rainfall into the weathered and fractured granitic bedrock. He testified that groundwater is transmitted through the weathered and fractured bedrock into the alluvium and then into Garrapata Creek. (Company Exhibit 17, Figure 8.) His conceptual flow model was based on the water balance and surface outflow of the watershed as a whole and did not address specific hydrologic conditions at the point of diversion. According to this conceptual model, infiltrating rainwater percolates vertically through the soil, colluvium and weathered zone into fractures in the bedrock until encountering the groundwater table. During the rainy season, the water table rises, reaching its highest elevation in April near the end of the winter rains. Groundwater flows laterally through interconnected fractures in the granitic bedrock and into the alluvium in the direction of the hydraulic gradient. The gradient goes from the bedrock into the alluvium because the water levels in the bedrock are higher than in the alluvium. From the alluvium, groundwater seeps into the channel of Garrapata Creek because the groundwater level in the alluvium is higher than the elevation of surface water in Garrapata Creek.

Dr. Johnson's conclusions were based on his estimates of the baseflow portion of the average annual surface flow of Garrapata Creek. Dr. Johnson testified that the weathering and fracturing in the granitic bedrock associated with the joints and faulting result in a secondary porosity capable of producing significant well yields. Dr. Johnson supported his conclusions by comparing water quality data for groundwater from the Company's well to data for Garrapata Creek. (Company Exhibit 17, pp. 4 and 5.)

To estimate the baseflow portion of Garrapata Creek surface flow, Dr. Johnson first estimated the average annual surface outflow of Garrapata Creek to the Pacific Ocean. Dr. Johnson used two different methods to calculate outflow (also called discharge). Both methods resulted in an estimate of about 5,000 acre-feet per annum (afa) for the average annual discharge of Garrapata Creek to the ocean. In the first method, Dr. Johnson used a soil water balance for the

watershed to arrive at the 5,000 afa discharge estimate. This method takes into account average annual precipitation in the watershed, air temperature, heat index, evapotranspiration, and soil moisture storage to determine the amount of surplus water available for surface runoff and groundwater recharge.

In the second method, Dr. Johnson compared instantaneous streamflow measurements of Garrapata Creek, reported by various observers, with average daily streamflows of the Big Sur River. The Big Sur River was used because it has the nearest recording gage to the Garrapata Creek watershed. Dr. Johnson developed a relationship that expressed Garrapata Creek flow as a percent of Big Sur River flow. Then, Dr. Johnson estimated the average monthly flows of Garrapata Creek as a percent of the average monthly flows of the Big Sur River. Summing the average monthly flows for Garrapata Creek gave an annual average streamflow of about 5,200 afa,[2] nearly the same as the estimate using the water balance approach.

To calculate the baseflow portion of Garrapata Creek streamflow, Dr. Johnson created an average annual hydrograph from the average monthly streamflow estimates. (Company Exhibit 17, Figure 7.) He assumed that from May through October, when there is little or no precipitation, 100 percent of the Garrapata Creek streamflow is baseflow. However, for the rainy season of November through April, the baseflow portion of the streamflow had to be separated from the runoff portion. Dr. Johnson reasoned that the rate of baseflow would reach its peak when the groundwater gradient in the watershed reached its peak at the end of the rainy season. (Company Exhibit 17, p. 3.) Thus he selected April as the month of peak baseflow.

Dr. Johnson estimated the magnitude of the peak baseflow to be 6 cubic feet per second (cfs) because an instantaneous streamflow of this magnitude was measured in Garrapata Creek on June 28, 1992. Since there had been no rain in almost two months, Dr. Johnson reasoned that the June 28 streamflow was 100 percent baseflow. (Company Exhibit 17, p. 3.) The baseflow separation curve is shown in the Company's Exhibit 17, Figure 7. The area beneath the lower curve in

[2] Dr. Johnson's actual calculation was 5,010 afa. The estimate of 5,200 afa reported above corrects errors in Dr. Johnson's estimates of average flow for the months of November, May, June, July, August, and September.

Figure 7 represents the average annual baseflow in Garrapata Creek and is equal to 1,900 afa. Dr. Johnson concluded that:

> "It is not possible to transmit the measured and estimated rates of Garrapata Creek baseflow into the stream except through the bedrock aquifer." (Company Exhibit 17, p. 4.)

Dr. Johnson's testimony indicates that the amount of water transmitted into the alluvium from the deep fracture system in the granitic bedrock actually is less than the 1,900 afa estimate of baseflow. During cross examination, he testified that some of the 1,900 acre-feet of baseflow could have been transmitted to the alluvium through the shallow zone of soil, colluvium, and weathered bedrock. Dr. Johnson testified that he did not attempt to quantify the amounts of water transmitted from the different zones into the alluvium because all the water, once it reached Garrapata Creek, would be within the definition of baseflow. (TI, 113:20-114:10.) This testimony contradicts the illustration of his conceptual model of groundwater flow shown in Figure 8 of his written testimony. (Company Exhibit 17.) This illustration depicts the alluvium being recharged only with water coming from the deep fracture system in the granitic bedrock.

On rebuttal, the Permitting Team showed that the shallow zone of soil, colluvium and weathered bedrock is capable of transmitting 1,900 afa of recharge to the alluvium. To show this, Mr. Peltier used a Darcy flow analysis presented in Exhibit U. Darcy's Law describes the rate of flow of water through porous media. The rate of flow (Q) is equal to the hydraulic conductivity of the medium (K) multiplied by the hydraulic gradient (I) and the cross-sectional area through which the water flows (A). The relationship is expressed as: $Q = K I A$

Mr. Peltier testified that the Darcy flow analysis showed that the shallow zone of weathered bedrock, colluvium and soil was easily capable of transmitting 1,900 afa of recharge to the alluvial aquifer and, ultimately, baseflow to Garrapata Creek. (TII, 280:6-21.) Mr. Peltier assumed that the hydraulic conductivity (K) of the shallow zone was equal to one foot per day. The hydraulic gradient (I) was assumed to be 0.25 foot per foot. The cross-sectional area of flow was assumed to be 1,056,000 square feet. These values are reasonable estimates as set forth below. Plugging

these values into the equation and converting the units to acre feet per year resulted in an annual flow through the shallow zone of 2,212 acre feet. (Permitting Team Exhibit U.)

Mr. Peltier testified that he used conservative estimates in this calculation. (TII, 281:18-283:4.) A hydraulic conductivity of one foot per day is appropriate for a highly fractured or weathered crystalline rock but is very conservative for colluvium and soil. Thus, the value of one foot per day is a reasonable, yet conservative, assumption for the hydraulic conductivity in the Darcy flow analysis. This assumption is consistent with Dr. Johnson's testimony that the hydraulic conductivity of the alluvium could range from 1 to 200 feet per day. The soil and colluvium would have a higher hydraulic conductivity because this material is less consolidated than the alluvium. Dr. Johnson testified that the hydraulic conductivity of the weathered bedrock and fractured bedrock could range from .01 to 5 feet per day. (TI, 126:2-7.) Mr. Peltier's estimate is within the range of values estimated by Dr. Johnson.

The hydraulic gradient of 0.25 represents a four to one slope (lateral run to rise) and is conservative based on the steepness of the canyon walls in Garrapata Creek which, at the point of diversion, is even steeper having a two to one slope. (TII, 282:10-19.) The cross-sectional area of flow is based on the Garrapata Creek watershed having 10 miles of surface channels and the shallow zone of weathered bedrock, colluvium and soil being 10 feet thick. The value of length and thickness is conservative based on topographic maps of the area (Permitting Team Exhibit S, Figure 2) and with Mr. Peltier's observations of the watershed. Thus, Mr. Peltier's conclusion that the shallow zone is capable of transmitting 1,900 afa of recharge to the alluvium is reasonable.

Mr. Peltier's conceptualization of the source of the baseflow in Garrapata Creek is supported by the evidence in the record. Dr. Johnson's calculations of the baseflow of the creek do not provide a convincing argument that groundwater must be transmitted from the deep fracture system in the granitic bedrock into the alluvium.

The Company did not present any testimony bearing directly on the permeability of the granitic bedrock in the Garrapata Creek watershed. However, Dr. Johnson testified that:

> "[A]quifers within fractured granitic rock are common throughout the world. The weathering of feldspar minerals into clay, contrary to the Division staff memorandum, does not compromise their viability." (Company Exhibit 17, p. 4.)

Dr. Johnson did not provide evidence to support his statement that aquifers within granitic rock are common throughout the world. Although such aquifers no doubt exist, the evidence provided by the Permitting Team indicates that such aquifers are the exception. (Permitting Team Exhibit M.) Dr. Johnson's statement that the weathering of feldspar minerals to clay does not compromise the permeability of those aquifers is true, provided the fractures and joints do not become clay filled as a result of the weathering process. As previously stated, however, the Permitting Team testified that some of the fractures and joints in the bedrock were observed to be clay-filled.

Based on anecdotal evidence, Dr. Johnson testified that wells in the granitic bedrock were capable of producing significant yields. (Company Exhibit 17, p. 4.) For example, Dr. Johnson reported that Mr. Layne knew of a bedrock well on the watershed ridge that provided water for 12 homes. Dr. Johnson testified that he did not know the pumping rate of this well. (TI, 75:4-25.) On rebuttal, Mr. Peltier testified that a well with a yield as low as 4 gallons per minute was capable of meeting a demand of 500 gallons per day per home for 12 homes. Mr. Peltier concluded that 4 gallons per minute of sustained flow does not necessarily indicate high productivity from the bedrock aquifer. (TII, 313:14-314:14.)

Another problem with the Company's case is that, even if the bedrock aquifer contributes an average of 1,900 afa of recharge to the alluvium in the watershed, the Company could not show where in the watershed this recharge is occurring. Even if substantial quantities of water are transmitted into the alluvium from the granitic bedrock in some parts of the watershed, that would not necessarily support the conclusion that the bedrock is sufficiently permeable to transmit significant quantities of water in the stream reach where the Company has its point of diversion. The Company offered no evidence that the bedrock is exceptionally permeable at the point of diversion to rebut the Permitting Team's observational evidence that, at the point of diversion, the

joints and fractures were narrow and clay-filled and unlikely to impart any significant permeability to the bedrock. On this subject, Dr. Johnson testified that the granitic bedrock would have areas of greater and lesser fracturing, but he did not investigate where these areas might be in the watershed. (TI, 128:11-18.) Dr. Johnson testified that conditions in the watershed vary quite a bit with some areas much more fractured and weathered than other areas. (TI, 61:25-62:2.)

The only evidence Dr. Johnson presented pertaining to conditions at the well site was water quality data for water from the Company's well. Dr. Johnson's written testimony states that:

> "The electrical conductivity of groundwater averages about 3.5 times greater than the streamflow. The pH and turbidity also are distinctly different. These differences are significant given that groundwater has been extracted continuously at this site for several decades, and indicate that the groundwater pumped from the Water Company well is derived from a source other than Garrapata Creek. (Company Exhibit 17, p. 4.) The water quality differences between the Water Company well and Garrapata Creek are consistent with the interpretation that groundwater flows from the bedrock aquifer across the watershed toward the creek. The groundwater is more mineralized because of its residence time in the bedrock aquifer." (Company Exhibit 17, p. 5.)

The electrical conductivity of water is proportional to the salinity of the water. Thus, electrical conductivity often is used as a field test to determine the relative salinity of groundwater and surface water samples. The electrical conductivity of groundwater increases as residence time in the aquifer increases because more minerals dissolve over time raising the level of salinity of the water. Electrical conductivity of groundwater also increases due to contamination from buried sources like septic tanks or leaching of fertilizer and other chemicals from irrigation.

The difference in electrical conductivity between the well water and the creek water shows that the groundwater is, as expected, more saline than the surface water. The difference, however, is not indicative of the geologic unit from which the well water originated. Mr. Peltier's testimony that the higher electrical conductivity of the groundwater could be due to residence time in the alluvium (TII, 315:1-7) is as valid as Dr. Johnson's explanation that the higher value is due to residence time in the granitic bedrock. The higher electrical conductivity of the groundwater also could be due to contamination from a septic system. Dr. Johnson testified that there is a residence

near the Company's well that probably has a septic tank. (TI, 79:21-23.) Mr. Layne testified that there are some septic systems upstream of the Company's well, but he thought they were in a "separate alluvium." (TI, 120:4-12.) Mr. Layne's meaning of "separate alluvium" is not clear from his testimony. Even if the Company could show that the salinity of the groundwater was due to residence time in the granitic bedrock, this information does not establish that groundwater is infiltrating from the bedrock into the alluvium at the Company's point of diversion.

The reliability of the water quality data presented by the Company is questionable. When asked to explain unusual trends in the temperature and pH data, Dr. Johnson testified that the trends were most likely due to errors in instrument calibration and typographical errors. Dr. Johnson testified that the unusually high pH values suggested an error in calibrating the pH meter. (TI, 124:8-20.) The temperature data included an unusual value that Dr. Johnson testified was perhaps a typographical error or a reporting error. (TI, 123:8-25.) These errors cast doubt on the reliability of the water quality data as a whole and do not inspire confidence that the electrical conductivity data are free of calibration errors or typographical errors. Mr. Layne testified that he calibrated the meters, took all of the temperature and pH measurements, and took 12 of the 14 electrical conductivity measurements. Mr. Layne testified that he had no special training regarding calibrating and using the meters, but operated them according to written instructions. (TI, 117:10-23.)

In summary, the record as a whole clearly demonstrates that the groundwater diverted from the Company's well is from a subterranean stream flowing through a known and defined channel. The granitic bedrock is relatively impermeable compared to the alluvium and forms the bed and banks of the subterranean stream. The Permitting Team's case is persuasive, and the Company's is not, because the Permitting Team addressed the aquifer characteristics of the bedrock and alluvium both at the point of diversion and throughout the watershed as a whole. The Permitting Team's evidence established that, in general, granitic rocks are very low in permeability because the crystalline texture of the rock has no primary porosity. The fractures and joints in granitic rocks generally do not impart significant secondary porosity or permeability because fractures are usually narrow, shallow and of limited extent. The Permitting Team provided direct observational evidence that the granitic bedrock in the Garrapata Creek watershed is typical of granitic rocks,

having a crystalline texture and narrow joints and fractures, some clay-filled. Additionally, the low specific capacities calculated for several wells in the granitic bedrock support a conclusion that the bedrock is relatively impermeable compared to the alluvium.

The Company relied on a watershed wide estimate of the volume of baseflow in Garrapata Creek to argue that the bedrock has sufficient permeability to preclude the existence of a subterranean stream. Dr. Johnson testified that the alluvium is not extensive enough to store and transmit this volume of baseflow into the surface stream, and that transmitting this volume through the colluvium is highly improbable. The Company's testimony was effectively rebutted, however, by evidence presented by the Permitting Team showing that the shallow zone of weathered bedrock, soil, and colluvium is capable of transmitting the Company's estimated volume of baseflow into the alluvium. Further, as noted above, the Company did not inspect the bedrock and describe its characteristics at the point of diversion. The Company claimed that water quality data for the well water and surface water supported the conclusion that the bedrock was permeable. The water quality data were not persuasive because the data could be explained by valid hypotheses other than the Company's, and the reliability of the data was compromised by errors in the data set.

The evidence in the record clearly establishes the presence of a subsurface channel with impermeable bed and banks relative to the alluvium filling the channel, the location of the course of the subsurface channel, and that groundwater is flowing in the channel. Therefore, the SWRCB finds and concludes that at the point of diversion, and throughout the watershed where the deposits of alluvium are bounded by the granitic bedrock, the groundwater flowing in the alluvium of the valley of Garrapata Creek constitutes a subterranean stream flowing through a known and definite channel.

4.0 APPLICABILITY OF CEQA

In general, CEQA applies to discretionary projects which are proposed to be carried out or approved by public agencies. (Pub. Resources Code, § 21080(a).)

CEQA defines a "project" to mean:

"[A]n activity which may cause either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, and which is any of the following:

". . . .

"(c) An activity that involves the issuance to a person of a . . . permit . . . by one or more public agencies." (Pub. Resources Code, § 21065.)

The Company admits that its application is a project as that term is used in section 21065 of the Public Resources Code. (TII, 329:24-330:10.)

The CEQA Guidelines (Cal. Code Regs., tit. 14, § 15000 et seq.) define a "discretionary project" to be a project "which requires the exercise of judgment or deliberation when the public agency or body decides to approve or disapprove a particular activity." (*Id.*, § 15357.) As will be discussed in Section 4.1 below, the Company believes its project is ministerial, not discretionary. Ministerial projects are exempt from CEQA. (Pub. Resources Code, § 21080, subd. (b)(1).)

"Approval" is defined in section 15352 of the CEQA Guidelines as "the decision by a public agency which commits the agency to a definite course of action in regard to a project intended to be carried out by any person." (Cal. Code Regs., tit. 14, § 15352, subd. (a).) For private projects such as the Company's Application 29664, "approval occurs upon the earliest commitment to issue or the issuance by the public agency of a discretionary . . . permit." (Cal. Code Regs., tit. 14, § 15352, subd. (b).)

The hearing which forms the basis for this decision was not held for the purpose of approving Application 29664. The SWRCB has not adopted a decision which commits it to a definite course of action with regard to Application 29664 and the SWRCB has made no commitment to issue a permit for the Company's project. Any findings concerning the potential for significant effects as a result of the project must be made based on the record before the SWRCB at the time the SWRCB approves the project. Therefore, any finding which finally determines CEQA applicability to Application 29664 is premature at this time. As explained below, although the

SWRCB tentatively concludes that CEQA applies to the approval of the Company's pending application, information regarding the Company's project and/or its impacts may become available in the future as part of an ongoing CEQA review which may change this conclusion. Further, as explained in section 4.3.1 below, the Company's project could be modified to qualify for a categorical exemption from CEQA.

The Company claims both statutory and categorical exemptions from CEQA. It claims to be statutorily exempt as a "ministerial project" pursuant to section 21080(b)(1) of the Public Resources Code and section 15268 of the CEQA Guidelines, and as an "ongoing project," pursuant to section 15261 of the CEQA Guidelines and section 21169 of the Public Resources Code. The Company also claims to be categorically exempt as an "existing facility" pursuant to section 15301 of the CEQA Guidelines.

4.1 Ministerial Project Exemption

The Company contends that its project is exempt from CEQA as a "ministerial project" pursuant to Public Resources Code section 21080(b)(1) and section 15268 of the CEQA Guidelines. The Company also contends that the SWRCB's regulations exempt the issuance of water right permits and licenses from CEQA. (TII, 337:17-341:12.)

Public Resources Code section 21080 provides that CEQA applies to discretionary projects. Subdivision (b)(1) of section 21080 exempts ministerial projects from CEQA. According to the CEQA Guidelines, a ministerial project is one in which the agency's decision to approve it involves:

> "[L]ittle or no personal judgment by the public official as to the wisdom or manner of carrying out the project. The public official merely applies the law to the facts as presented but uses no special discretion or judgment in reaching a decision." (Cal. Code Regs., tit. 14, § 15369.)

The ministerial exemption applies only where the agency has no discretion over whether and under what circumstances to approve an application. The exemption does not apply to the SWRCB's decision on Application 29664, because the SWRCB has broad discretion to approve,

condition, or deny an application to appropriate unappropriated water. (See Wat. Code, § 1200, et seq.)

Water Code sections 1255-1259 require the SWRCB to determine that the proposed appropriation is in the public interest and to consider such things as the relative benefit to be derived from all beneficial uses of water as well as the amounts of water needed to remain in the source for protection of beneficial uses. The SWRCB may subject appropriations to the terms and conditions "as in its judgment will best develop, conserve, and utilitze in the public interest the water sought to be appropriated." (Wat. Code, § 1257, emphasis added.)

The California Supreme Court held that the SWRCB exercises broad discretion in determining whether the approval of an application will best serve the public interest and that a decision of the SWRCB to approve an application is a quasi-judicial decision, not a ministerial act. (*Temescal Water Co.* v. *Dept. of Public Works* (1955) 44 Cal.2d 90, 100 [280 P.2d 1, 7].) The SWRCB must also consider the public trust when deciding whether to approve water right applications. (*National Audubon Society* v. *Superior Court* (1983) 33 Cal.3d 419 [189 Cal.Rptr. 346].) Because the SWRCB must exercise its discretion in deciding whether to approve applications to appropriate unappropriated water and whether to subject the appropriation to specific terms and conditions to protect the public interest and the public trust, the decision to approve, condition, or deny an application is not a ministerial act.

The Company contends that the SWRCB's regulations exempt the issuance of water right permits and licenses from CEQA because their issuance is a ministerial act. The regulations of the SWRCB provide, in pertinent part:

> "Ministerial projects are exempt from the requirements of CEQA and do not require the preparation of environmental documents. Generally, in the absence of special circumstances, the following activities have been determined to be ministerial projects:
>
> "....

"(c) Issuance of permits to appropriate water pursuant to a decision or order of the state board." (Cal. Code Regs., tit. 23, § 3730, subd. (c), (emphasis added).)

The plain language of the SWRCB's regulation applies to the actual issuance of permits to appropriate water and not to the adoption of decisions or orders of the SWRCB that approve the issuance of the permits. Issuance of the permit is ministerial because the descretionary decision to approve the permit and to determine what conditions should be included in the permit has already been made. (See also SWRCB Resolution 97-006, § 3.2.15 [in effect at the time of the hearing on this matter] and Resolution 99-031, § 3.2.17 [currently in effect] delegating authority to the Chief of Division of Water Rights to "[i]ssue permits . . . after Board decision or order." (emphasis added).) Given the SWRCB's broad discretion to approve, condition, or deny water right applications, the Company's contention that approval of its application is ministerial has no basis in law.

4.2 Ongoing Project Exemption

The Company contends that because it obtained approvals from the Public Utilities Commission (Certificate of Public Convenience and Necessity, Company Exhibit 3), Department of Highways of the State of California (Utilities Encroachment Permit, Company Exhibit 4), and the State Board of Public Health (Water Supply Permit, Company Exhibit 5) prior to 1973, it is exempt from CEQA as an ongoing project. (TII, 331:9-21.)

The statutory exemption for ongoing projects carried out by private parties but subject to governmental approvals is established by section 21169 of the Public Resources Code and applied and interpreted by subdivision (b) of section 15261 of the CEQA Guidelines. If the ongoing project exemption applies, no environmental documentation is required to meet the requirements of CEQA, although the SWRCB would still have authority under the Water Code and the public trust doctrine to require submission of information on environmental impacts relevant to its decision and to consider those environmental impacts in deciding whether and under what conditions to approve a permit. (See Wat. Code, § 1255-1276; Cal. Code Regs., tit. 14, § 15261, subd. (b)(1).)

The statutory exemption for ongoing projects should be distinguished from the categorical exemption for existing facilities. A project may be exempt from CEQA pursuant to the exemption for existing facilities, discussed in section 4.3, below, based on the determination that because the facility is already in place, approval of the facility will not cause an adverse impact on the environment. (See *Azusa Land and Reclamation Co.* v. *Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1191-22 [61 Cal.Rptr.2d 447, 462] (hereafter *Azusa*).) The Legislature enacted the statutory exemption for ongoing projects, on the other hand, to allow completion of private projects approved after CEQA was enacted but before CEQA was interpreted to apply to private projects. (*Id.* at 1216-18 [61 Cal.Rptr.2d at 478-79].) The ongoing projects exemption was enacted as part of legislation that also placed a moratorium on the applicability of CEQA to governmental approvals of private projects. Together these sections exempt governmental approvals of private projects from CEQA if those approvals were issued before April 5, 1973. (See Pub. Resources Code, §§ 21169, 21171. But see *id.* § 21170.)

The courts are divided as to whether the ongoing project exemption has any applicability where a project was first approved before CEQA took effect, or before or during the moratorium on the applicability of CEQA to private projects, but another governmental approval is required later. In *Azusa* the court held that the ongoing project exemption does not apply to these later approvals. (52 Cal.App.4th 1165, 1216-18 [61 Cal.Rptr.2d 447, 478-79].) The court refused to follow section 15261 of the CEQA Guidelines, concluding that section 15261 is inconsistent with the statute, and is therefore invalid, because it exempts governmental approvals issued after the dates specified under CEQA. (*Id.* at 1218-19 [61 Cal.Rptr.2d at 479-80].) In *Nacimiento Regional Water Management Advisory Committee* v. *Monterey County Water Resources Agency* (1993) 15 Cal.App.4th 201 [19 Cal.Rptr.2d 1] (hereafter *Nacimiento*), on the other hand, the Court of Appeal applied section 15261 of the CEQA Guidelines to a 1991 agency decision. The court held that because the construction and operation of a reservoir initially approved and built before CEQA was an ongoing project, a later decision that adjusted project operations but did not enlarge project facilities was exempt from CEQA. (*Id.* at 202-205 [19 Cal.Rptr.2d at 2-4].)

We need not decide here which approach is correct.[3] The decision to issue a water right permit for the Company's well does not qualify as an ongoing project under either the *Azusa* interpretation or under the approach followed by *Nacimiento* and the CEQA Guidelines. Obviously, because any SWRCB approval would be issued after the April 5, 1973, expiration of the moratorium on the applicability of CEQA to private projects, the SWRCB's action would not come within the ongoing project exemption as interpreted by *Azusa*. Nor would issuing a water right permit constitute an ongoing project as the exemption is interpreted in *Nacimiento*, because the SWRCB action would be beyond the scope of the exemption as set forth in section 15261 of the CEQA guidelines.

Section 15261 of the CEQA Guidelines states in relevant part:

> "(b) A private project shall be exempt from CEQA if the project received approval of a lease, license, certificate, permit, or other entitlement for use from a public agency prior to April 5, 1973, subject to the following provisions:
>
> ". . . .
>
> "(3) Where a private project has been granted a discretionary governmental approval for part of the project before April 5, 1973, and another or additional discretionary governmental approvals after April 5, 1973, the project shall be subject to CEQA only if the approval or approvals after April 5, 1973, involve a greater degree of responsibility or control over the project as a whole than did the approval or approvals prior to that date."

Approval of a water right application by the SWRCB involves a greater degree of responsibility or control than earlier approvals by the Public Utilities Commission, the State Department of Highways, and the State Board of Public Health. These prior approvals did not entail an overall evaluation of the project and its impacts. Rather, these other agency approvals focused on specific aspects of the project. A review of the approvals issued by the other agencies also reveals

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[3] *Azusa,* which was decided later, does not distinguish or otherwise discuss *Nacimiento.* Although *Azusa,* like this proceeding, involved a private project, while *Nacimiento* involved a project carried out by a public agency, that does not provide a logical basis for distinguishing the two cases. Both cases involved the issue whether a discretionary approval that would otherwise be subject to CEQA should nevertheless be exempt based on its relationship to earlier approvals of the same project that were not subject to CEQA, either because those earlier

that these were routine approvals, not involving extensive review or control over the project. The Public Utilities Commission approval, issued without a hearing based on the information provided in the Company's application, involved a determination whether the Company's service area was already served by another public utility, whether the Company had adequate finances to provide water service, whether the rates to be charged for water service were reasonable, and whether the Company's water supply and distribution facilities met minimum requirements. (Company Exhibit 3, p. 3.) The Department of Highways and Board of Public Health approvals are form approvals, subject to a few conditions requiring compliance with requirements for avoiding interference with state highways, and compliance with state health requirements for drinking water, respectively. (Company Exhibits 4 and 5.) None of these prior approvals involve consideration of the effects of diversions from Garrapata Creek on the environment or on other users of the creek.

In contrast, when the SWRCB reviews a water right application, the SWRCB considers the availability of unappropriated water to supply the applicant, the effects of the diversion on prior rights and public trust resources, as well as impacts on the river and the aquifer, and whether the appropriation is in the public interest. If there is unappropriated water available to supply the applicant, the SWRCB then determines under what terms and conditions the applicant may divert and use the water. These conditions will almost certainly be more extensive than those established in the prior agency approvals.

The SWRCB's review process provides opportunities for third party intervention. In contrast to the other approvals, which were uncontested, three parties filed protests to the Company's water right application. The SWRCB's process provides opportunity for the presentation of evidence and resolution of the protests before final action is taken on the application.

Because the SWRCB's review of a water right application involves a greater degree of oversight and control than was involved in the prior approvals, the SWRCB approval is not within the scope of section 15261 of the CEQA Guidelines, and the ongoing project exemption does not

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approvals were issued before CEQA was enacted or because the sections enacted in response to *Friends of Mammoth* made CEQA inapplicable to those earlier approvals.

apply. (See *People* v. *County of Kern* (1974) 39 Cal.App.3d 830, 835 n. 5, 839-40 [115 Cal.Rptr. 65, 70-71 n.5, 73-74] [holding that the ongoing project exemption did not apply to an approval issued after April 5, 1973, that the governmental agency issuing the approval had determined to involve a greater degree of responsibility and control than previous approvals].)

Even if the ongoing project exemption were otherwise available, it does not apply to projects being operated unlawfully, without obtaining all necessary approvals. Public Resources Code section 21169 states in relevant part:

> "Any project defined in subdivision (c) of Section 21065 undertaken, carried out, or approved on or before the effective date of this section [December 5, 1972] and the issuance by any public agency of any lease, permit, license, certificate or other entitlement for use executed or issued on or before the effective date of this section notwithstanding a failure to comply with this division, if otherwise legal and valid, is hereby confirmed, validated and declared legally effective." (Emphasis added.)

The Company needs a permit to appropriate the water it is now diverting from the Garrapata Creek subterranean stream to be "otherwise legal and valid" in accordance with section 21169. (Wat. Code § 1052.) Therefore, the Company's project cannot be validated pursuant to section 21169 and is not exempt from CEQA.[4]

Finally, the ongoing project exemption applies only to the original project, not to subsequent expansions. (See SWRCB Order WQ 88-5 at 5-7 [observing that, in addition to the requirement that the later approval must not involve a greater degree of responsibiity and control, the later approval must not involve an expansion beyond what was estimated in the original approval].) As

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[4] The purpose of section 21169 was to ameliorate the hardship that could have been created by the Supreme Court's decision in *Friends of Mammoth* v. *Board of Supervisors* (1972) 8 Cal.3d 247 [104 Cal.Rptr.761] (hereafter *Friends of Mammoth*), which held that CEQA applies to private as well as public projects and applied its ruling retroactively. (*Azusa, supra,* 52 Cal.App.4th 1165, 1616-17 [61 Cal.Rptr.2d 447, 478].) Development projects being constructed in reliance on governmental approvals previously thought to be exempt from CEQA could be disrupted if those approvals were invalidated for failure to comply with CEQA. The effect of section 21169 was to protect these approvals from challenge by limiting the retroactive applicability of *Friends of Mammoth*. (*Id.*; *Cooper* v. *County of Los Angeles* (1977) 69 Cal.App.3d 529, 533 [138 Cal.Rptr. 229, 231].) Where the project is completed without obtaining all necessary approvals, however, the case for exempting the project from CEQA based on the project proponent's actions is less than compelling.

part of its application for approval by the Public Utilities Commission, the Company estimated that "there will ultimately be about 30 residential customers and one commercial user." (Company Exhibit 2, p. 2.) As discussed in section 4.3.1, the Company now serves 38 residential customers and one commercial user, and the Company's application proposes to more than double the amount of water diverted. Even assuming the ongoing project exception was otherwise applicable to the issuance of a water right permit to the Company, it is questionable whether the exemption would apply unless the Company modified its application or the SWRCB conditioned its approval to avoid this expansion.

4.3 Existing Facility Exemption

The Company contends that its project is exempt from CEQA as an "existing facility" pursuant to section 15301 of the CEQA Guidelines.

4.3.1 Applicability of the Existing Facilities Exemption

Section 15301 describes existing facilities which are exempt as:

> "[T]he operation, repair, maintenance, permitting, leasing, licensing, or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographic features, involving negligible or no expansion of use beyond that existing at the time of the lead agency's determination." (Cal. Code. Regs., tit. 14., § 15301, emphasis added.)

The baseline for determining whether the existing facilities exemption applies is the time the SWRCB determines CEQA applicability to Application 29664, not the effective date of CEQA. (*Bloom* v. *McGurk* (1994) 26 Cal.App.4th 1370 [31 Cal.Rptr.2d 914, 918]; Cal. Code Regs., tit. 14, § 15301.)

The Company currently serves 38 homes and the Rocky Point Restaurant. (Company Exhibit 18, p. 3.) There are six lots which have not yet been developed, one of which may not be developed. (*Id.*; TI, 30:22-31:20.)

Several years ago, the Company installed a meter at its well site. (Company Exhibit 18, p. 8; TI, 20:19-21:24.) The meter has been in operation continuously since its installation. (TI, 21:25-22:2.) The meter is not read on any regular basis and there are only three meter readings in the record. (Company Exhibit 18, p. 8; TI, 22:3-15.) Individual connections do not have meters. (TI, 25:24-26:1.) No limit on water use for each connection exists, each user may use as much as the user wants. (TI, 26:25-27:4.)

The Company has provided three estimates of its current water use. Mr. Layne estimated the Company's current water use to be 0.1 cfs which is equal to 64,632 gallons per day (gpd) or 72 afa. (Company Exhibit 18, p. 7.) Mr. Layne provided no basis or support for this estimate of water use. Mr. Layne did not define "water use." Whether his estimate is the amount of groundwater pumped or the amount of water put to beneficial use or whether there is a significant difference between the two amounts is not clear. Mr. Layne also estimated the

Company's current water use to be 23,310 gpd or 25.55 afa based on meter readings.[5] (Company Exhibit 18, p. 8.) Dr. Johnson estimated the current water use of the Company to be approximately 35 afa. (TI, 45:12-14.) Although Dr. Johnson testified that 35 afa is a high estimate (TI, 68:2-13), it is a reasonable estimate of current annual water use by the Company.

In Application 29664, the Company has applied to divert 72,000 gpd year round from Garrapata Creek Subterranean Stream with a limitation of 81 afa. According to the Company, this amount represents actual use "plus a little extra in case some of our weekend houses turn into permanent residences, plus a little extra in case of leaks, and a little extra for 6 more homes and lastly, a goodly allowance as an error factor." (Company Exhibit 18, p. 8.) In fact the amount applied for is considerably more than any of the estimates of current use. Accordingly, the Company's project is not exempt as an existing facility because, by its own admission, the Company's water use and service connections will increase in the future as full build-out occurs, and because the amount applied for by the Company in Application 29664 far exceeds existing use. This expansion of use negates the use of the categorical exemption for existing facilities. (Cal. Code Regs., tit. 14, § 15301, *Bloom* v. *McGurk, supra.*)

As noted above, any findings concerning the applicabilty of CEQA must be based upon the facts in the record at the time the SWRCB makes its decision. Thus, the SWRCB's determination as to the applicability of the existing facility exemption could change from the tentative conclusions of this order, based on new information on actual water use or a willingness of the Company to reduce the amount it applied for in its application to the amount of existing use. The Company may find it beneficial to commence reading its meter on a regular basis to have a more complete record of its diversions from Garrapata Creek. If the Company reduces the amount applied for in Application 29664 to the amount of its current annual diversion, the existing facilities exemption

[5] According to the Company, the meter showed 40,673,500 on July 12, 1997; 43,073,300 on September 13, 1997; and 53,773,000 on December 17, 1998. Company Exhibit 18, p. 8; Permitting Team Exhibit A, September 15, 1997, letter to Robert Been from Donald M. Layne. Accordingly, between July 12, 1997 and December 17, 1998 (524 days), 13,099,500 gallons were used. This computes to 25,000 gpd or 28 afa, not 23,310 gpd or 25.55 afa as calculated by Mr Layne.

probably would apply. (Cf. *Committee for a Progressive Gilroy* v. *SWRCB* (192 Cal.App.3d 847, 864 [237 Cal.Rptr. 723, 733-34] [order permitting sewage treatment plant, without authorizing any expansion of capacity, was exempt from CEQA under the categorical exemption for existing facilities].)

Ordinarily, the SWRCB would be reluctant to apply the existing facilities exemption in a case where facilities have been constructed and diversion of water has been initiated without first obtaining a water right permit. Applying the existing facilities exemption to existing, unauthorized diversions would encourage applicants to initiate diversions without first obtaining water right permits, undermining the policies of both CEQA and the Water Code. (See generally *People* v. *Shirokow* (1980) 26 Cal.3d 301, 308-10 [162 Cal.Rptr. 30, 35-56] [the Legislature intended to vest the SWRCB with "expansive powers to safeguard the scarce water resources of the state," but the SWRCB's ability to carry out its statutory mandates is impaired to the extent that there are unsanctioned uses]; *Friends of Mammoth, supra,* 8 Cal.3d 247, 259 [104 Cal.Rptr. 761, 768] ["the Legislature intended [CEQA] to be interpreted in such a manner as to afford the fullest possible protection to the environment within the reasonable scope of the statutory language"].) We do not believe that applying the existing facilities exemption would undermine those policies under the circumstances presented in this case, where project construction was completed before CEQA and the applicant apparently did not know that a water right permit was required. Nor has there been any change or expansion in place of use or purpose of use since CEQA was enacted. Applying the categorical exemption under these limited circumstances would not provide any incentive for appropriators to initiate new diversions or increase existing diversions in the hopes of circumventing environmental review or undermining the SWRCB's ability to require modifications to the project to avoid adverse affects on water resources.

4.3.2 Exceptions to the Categorical Exemption

The CEQA Guidelines contain exceptions to the categorical exemptions to CEQA. (Cal. Code Regs., tit. 14, § 15300.2.) The DFG and the Permitting Team contend that even if the Company's project would otherwise be categorically exempt as an existing facility, the exemption cannot be used because the exception provided in subdivision (c) of section 15300.2 of the CEQA

Guidelines applies to this case. The exception to the exemption applies where "there is a reasonable possibility that the activity will have a significant effect on the environment due to unusual circumstances." (Cal. Code Regs., tit. 14, § 15300.2, subd. (c).)

The DFG and the Permitting Team contend that the possible significant effect on the environment due to unusual circumstances is the possible impact to steelhead trout from the diversion of water from Garrapata Creek by the Company. Steelhead trout are listed as threatened pursuant to the federal Endangered Species Act and are a State Species of Special Concern. (DFG Exhibit 6, p. 2.) The evidence in the record indicates that steelhead trout reside in Garrapata Creek. (DFG Exhibit 6, p. 2; DFG Exhibit 7, p. 1; DFG Exhibit 8; DFG Exhibit 9, p. 4; TI, 164:17-21; TII, 343:1-8.)

Relatively minor changes in the environment that would be considered insignificant elsewhere, may constitute significant impacts where they would adversely affect an endangered species. Thus, the increase in diversion that would be authorized if the SWRCB approved the Company's application as proposed might well preclude reliance on a categorical exemption that might otherwise apply. As noted in section 4.3.1, however, the categorical exemption cannot be relied upon for approval of the Company's diversion unless the proposed diversion is reduced to avoid any expansion of water use. If any increase or expansion of diversion or use is precluded, the possibility of a significant effect will be avoided.

According to CEQA, a "significant effect on the environment" is defined as "a substantial, or potentially substantial, adverse change in the environment." (Pub. Resources Code, § 21068 (emphasis added). See also Cal. Code Regs., tit. 14, § 15382.) "Environment" is defined in CEQA and the Guidelines as "the physical conditions which exist within the area which will be affected by a proposed project including . . . fauna . . . ." (Pub. Resources Code, § 21060.5; Cal. Code Regs., tit. 14, § 15360.) According to *Bloom, supra,* the baseline for analyzing change in the environment is the time of the SWRCB's determination. Therefore, if amount of diversion and use is restricted so the categorical exemption for existing facilities applies, and there is no evidence in the record that operations will be altered in a manner that could adversely affect the

environment, by definition there cannot be a significant effect on the environment because there is no change in the environment.

The mere existence of "unusual circumstance" does not necessarily preclude the applicability of a categorical exemption. Rather, there must be a reasonable possibility of a significant effect as a result of the unusual circumstance. Thus, the presence of a threatened species does not preclude use of a categorical exemption if there will be no effect on the species or its habitat, or any potential effect would be beneficial. If the diversions were limited so that the categorical exemption for existing facilities were applicable, there would be no evidence of any change in the environment caused by unusual circumstances because both the threatened species and the Company's diversion are part of the existing environment. Therefore, the exception to the exemption would not apply, and the SWRCB's action on the Company's application would be categorically exempt from CEQA.

The applicability of a categorical exemption does not mean that the needs of rare, threatened or endangered species will be ignored. To carry out its duty of continuing supervision to apply the public trust doctrine, the SWRCB will give careful scrutiny to possible impacts to threatened species in reviewing the Company's application. Even where the Company is not proposing any change in operations or the amount of water diverted or used, the SWRCB retains authority in reviewing the Company's application under the Water Code and the public trust doctrine, to establish terms and conditions to avoid or migitate any harm that the Company's diversions are causing or threaten to cause to the steelhead trout in Garrapata Creek, even though that harm is part of the existing conditions.

5.0 CONCLUSION

The SWRCB finds and concludes the following:

1. The water in the alluvium of the valley of Garrapata Creek is part of a subterranean stream flowing through a known and definite channel.

2. The diversion of water from the Garrapata Creek Subterranean Stream is within the permitting authority of the SWRCB.

3. The project described in the Company's Application 29664 is not exempt from CEQA.

4. If the Company were to modify its project to limit the amount of water in its application to existing use, the project may be exempted from CEQA under the categorical exemption for existing facilities.

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ORDER

IT IS HEREBY ORDERED THAT the Chief of the Division of Water Rights expedite processing of Application 29664.

CERTIFICATION

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of a decision duly and regularly adopted at a meeting of the State Water Resources Control Board held on June 17, 1999.

AYE: James M. Stubchaer
Mary Jane Forster
John W. Brown
Arthur G. Baggett, Jr.

NO: None

ABSENT: None

ABSTAIN: None

Maureen Marché
Administrative Assistant to the Board