PETE WILSON, Governor

CALIFORNIA COASTAL COMMISSION

NORTH COAST AREA 45 FREMONT, SUITE 2000 SAN FRANCISCO, CA 94105-2219 (415) 904-5260





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March 8, 1996 April 26, 1996 September 4, 1996

James Muth March 22, 1996 April 10, 1996

STAFF REPORT: REGULAR CALENDAR

APPLICATION NO.:

1-95-44

APPLICANT:

MORGAN REDI-MIX (RANDY MORGAN)

PROJECT LOCATION:

The downstream portion of the Simpco Gravel Bar in the Smith River, 1,150 to 2,100 feet downstream from the Dr. Fine or Highway 101 Bridge, in the Smith River area of Del Norte County. APN's 105-020-38 and

105-020-39.

PROJECT DESCRIPTION:

Seasonally extract up to 75,000 cubic yards of river

run gravel per year for five years.

Extraction area:

Plan designation:

Zoning:

4 acres

RCA-1, General Resource Conservation Area. RCA-2(r) and (e), Designated Resource Conservation Area, riparian and estuary.

LOCAL APPROVALS RECEIVED:

County Use Permit No. 8804C.

OTHER APPROVALS REQUIRED:

California Department of Fish and Game annual 1603

Streambed Alteration Agreement, State Lands Commission review, and U.S. Army Corps of

Engineers Section 404 permit.

SUBSTANTIVE FILE DOCUMENTS:

Smith River Gravel Study, California Department

of Water Resources, Jan 1974.

STAFF NOTE: The proposed development is located within the banks of the Smith River and within the Commission's retained coastal development permit jurisdiction. Thus, the standard of review for the permit application is the Coastal Act.

SUMMARY OF STAFF RECOMMENDATION: Staff recommends approval with conditions. The conditions are necessary to make the project consistent with the Sections 30231, 30233, and 30240 of the Coastal Act by: (a) minimizing alteration of the Smith River, (b) maintaining the biological productivity and quality of coastal waters and wetlands, and (c) protecting fisheries, wildlife, and environmentally sensitive, riparian habitat areas located within or along the banks of the Smith River.

STAFF RECOMMENDATION:

The staff recommends that the Commission adopt the following resolution:

I. Approval with Conditions.

The Commission hereby grants a permit, subject to the conditions below, for the proposed development on the grounds that the development will be in conformity with the provisions of Chapter 3 of the California Coastal Act of 1976, will be in conformity with the provisions of the Del Norte County LCP, is located between the sea and the first public road nearest the shoreline and is in conformance with the public access and public recreation policies of Chapter 3 of the Coastal Act, and will not have any significant adverse impacts on the environment within the meaning of the California Environmental Quality Act.

- II. Standard Conditions. See attached.
- III. Special Conditions.
- 1. State Lands Commission Review.

PRIOR TO THE ISSUANCE of the coastal development permit, the applicant shall submit to the Executive Director a written determination from the State Lands Commission that:

- a. No State lands are involved in the development; or
- b. State lands are involved in the development and all permits required by the State Lands Commission have been obtained; or
- c. State lands may be involved in the development, but pending a final determination an agreement has been made with the State Lands Commission for the project to proceed without prejudice to that determination.
- 2. Annual Administrative Approval to Continue Operations. COMMENCING WITH THE 1996 EXTRACTION SEASON, PRIOR TO THE START OF SEASONAL GRAVEL EXTRACTION OPERATIONS, the applicant shall submit for the review and approval of the Executive Director an annual report that contains: (1) a copy of an approved annual use permit from Del Norte County for the coming gravel extraction

season, (2) a copy of an approved annual 1603 Streambed Alteration Agreement from the California Department of Fish and Game for the coming gravel extraction season, (3) a copy of any necessary approval from the State Lands Commission if required by that agency, (4) a copy of any necessary permit approval from U.S. Army Corps of Engineers for the coming gravel extraction season, and (5) a copy of an annual volumetric/environmental assessment which provides the following information: (a) engineering data (prepared by a California Registered Engineer or a qualified Hydrologist or Geologist) that includes a set of dated, standardized, scaled, and surveyed, cross-sections and longitudinal-sections depicting existing grade elevations and configurations of the gravel bar and the extraction area, (b) a longitudinal (parallel to the river) bisection of the extraction area, with the first bisection showing the extraction area at the end of the prior extraction season (October/November) and the second bisection showing the extraction area in the Spring for the upcoming season, (c) an updated aerial photograph of the project area shown at a scale of 1 inch equals 600 feet or better taken in February of the applicable year, (d) an analysis of the amount and configuration of the replenished gravel material within the approved gravel extraction site, and (e) an analysis of any changes or impacts upon the habitat values and geomorphology of the river in the area surrounding the project site since the previous year. The Executive Director shall approve the report if the report adequately provides the required information and if the proposed gravel extraction for the coming season is consistent with the terms and conditions of this permit, including the requirement of Condition No. 3 regarding seasonal extraction limits. The applicant shall not commence gravel extraction operations for the season until the Executive Director has approved the annual report in writing.

3. Annual Extraction Limits.

The applicant shall extract no more than 75,000 cubic yards of gravel per year, or the amount of available gravel, whichever is the lesser amount in any given year. The "amount of available gravel" is the amount of gravel that can be taken from the approved gravel extraction area using a skimming and/or trenching operation that has been approved by the California Department of Fish and Game in its annual 1603 Streambed Alteration Agreement. Any skimming operation shall leave the final surface elevation of the bar above the low water level of the river with a slope of 2 percent or greater that drains towards the main channel of the river. In addition, gravel extraction operations shall not be conducted within 1,000 feet of the Dr. Fine or Highway 101 Bridge.

4. Annual Extraction Season.

Extraction shall only be performed during the period that is established by the California Department of Fish and Game in their annual 1603 Streambed Alteration Agreement.

5. Expiration Date.

The permit shall expire on February 1, 2001, and shall not be subject to a time extension. Continued gravel extraction operations after the expiration date shall require a new coastal development permit.

6. Resource Protection.

No sand or gravel materials shall be removed from the live waters of the river. No equipment shall operate within, and no material shall encroach upon, the live waters of the river. Gravel extraction operations shall not disturb or remove any vegetation located on the banks of the river. Gravel extraction operations shall be conducted within the approved gravel extraction area as directed by the California Department of Fish and Game.

7. Permit Amendment.

Any proposal to take more than the maximum permitted 75,000 cubic yards of materials, to take more than the amount of available gravel, to increase the size of the approved gravel extraction area, to take gravel from locations not authorized by the terms and conditions of this permit, or to make other significant changes to the proposed operation shall require an amendment to this permit.

IV. Findings and Declarations.

1. Project and Site Description.

The applicant proposes to seasonally remove up to 75,000 cubic yards of river run sand and gravel per year for a period of 5 years from a $4\pm$ acre, portion of the Simpco Gravel Bar. The Simpco Gravel Bar is located in the bed of the Smith River, about 300 feet to 2,100 feet downstream and west of the Dr.. Fine or Highway 101 Bridge in Del Norte County. See locational Exhibits No. 1 and No. 2.

The Simpco Gravel Bar is one of five gravel bars that are located within the coastal zone along the lower reaches of the Smith River. The lower Smith River flows through a broad alluvial floodplain that is extensively used for agriculture. From bank to bank, the river is about 550 to 650 feet wide in the area of the Simpco Gravel Bar. However, during the summer and early fall months when low flow conditions exist, the river is confined to its main channel, which is about 100 feet wide. The north and south banks of the river near the Simpco Bar are 20 to 30 feet high and are covered with well established riparian vegetation.

The proposed gravel extraction area is about 4 acres in size and is located on the downstream and southwesterly portion of the Simpco Gravel Bar. The project site is noted as the "gravel extraction site" on the site plan in Exhibit No. 3. The gravel extraction area is about 100 feet to 300 feet wide

and 1,000 feet long. Recent volumetric assessments indicate that $95,000\pm$ cubic yards of gravel is available within the proposed gravel extraction area. The assessment indicates that 60,000 cubic yards of material is available by surface skimming and that an additional 35,000 cubic yards of material is available by trenching.

A seasonal or overflow channel runs along the north bank of the river, between the river bank and the gravel bar. The seasonal overflow channel is typically dry during the summer and early fall gravel extraction season. However, the overflow channel may still contain a series of small and very shallow freshwater ponds in the areas identified as "V, VI, VII, and VIII" on the site plan in Exhibit No. 3. Access to the gravel bar and the extraction site is via an unimproved gravel road that crosses the seasonal channel and ascends the river bank.

The proposed gravel extraction area was the subject of a botanical investigation in September of 1995 by Karen Theiss and Associates, Biological and Environmental Consultants. Among other things, the investigation noted that the bar is scoured by winter and spring waters during hydrologic years of normal rainfall. This scouring action results in vegetation on the bar that is characterized by mostly herbaceous species and scattered young willows.

The proposed project is a continuation of an ongoing gravel extraction operation which the Coastal Commission last approved in September of 1989 under Permit No. 1-89-94 for Reservation Ranch (Henry Westbrook). Permit No. 1-89-94 was approved by the Coastal Commission for a period of five years. In July of 1991, the permit was assigned from Reservation Ranch to Morgan Redi-Mix (Randy Morgan). Mr. Morgan continued to seasonally take gravel from the bar until the permit expired on February 1, 1995. The applicant is asking to remove the same amount of gravel as was previously approved under Permit No. 1-89-94; namely, up to 75,000 cubic yards of material per year, or the amount of available material, whichever is the lessor amount. The proposed extraction area under this permit application is slightly smaller than the extraction area which was previously approved by the Coastal Commission under Permit No. 1-89-94.

The project requires a coastal development permit from the California Coastal Commission because the gravel extraction area is located within the Commission's area of original or retained permit jurisdiction. See Exhibit No. 2. The gravel processing and stockpiling operation on the north side of the river is subject to a separate local coastal development permit/use permit from the County. In July of 1995, the applicant obtained two annually renewable, five-year County use permits for the gravel extraction operation on the Simpco Bar and for the gravel stockpiling and processing operation on the north side of the river. The two County use permits are subject to an annual review/renewal by the County on February 1st of each year and both use permits expire on February 1, 2000. The applicant has also obtained a yearly 1603 streambed alteration agreement from the California Department of Fish and Game.

Gravel bar extraction operations on north coast rivers are seasonal operations. The gravel extraction season typically begins sometime after July 1st and runs to about October 15th. This period of time coincides with low water conditions of the river when substantial portions of the gravel bars are exposed and above the live waters of the river.

In the past, the applicant has taken gravel from the Simpco Gravel Bar using skimming operations, trenching operations, or a combination of both operations. The skimming method of gravel extraction is the traditional method of taking gravel from the bars. Gravel removal by skimming occurs outside of the low flow channel of the river. In skimming operations at the site, the operator skims gravel from the top of the bar in a manner that creates a shallow-sloped plain rising gently back from the river to the landward edge of the bar. Gravel removal equipment includes front-end loaders, scrapers, pushcats, excavators or equivalent equipment. Gravel is transported from the extraction area by dump trucks or off-road trucks and stockpiled on the upland portion of the subject property. After completion of gravel extraction operations, the applicant returns the gravel bar to a smoothly graded condition by sloping the surface of the gravel bar toward the main channel at no less than a two percent grade, and without any pits, potholes, trenches, mounds, or stockpiles to prevent the creation of fish traps.

The applicant has also taken gravel from the Simpco Gravel Bar using trenching operations when recommended by the California Department of Fish and Game in its annual 1603 Streambed Alteration Agreement. The current application proposes a continuation of this arrangement. The trench will vary in size and location from year to year, depending on bar conditions and what limitations the operator negotiates with the California Department of Fish and Game. If the trenching method is used, the applicant is required by the Dept. of Fish and Game to construct and maintain a berm along the entire length of the excavation area to prevent turbid water from entering the flowing river. applicant typically begins excavation on the downstream end of the bermed gravel bar and excavates in an upstream direction that is parallel to the river, with the depth and width of the trench to be determined by the California Department of Fish and Game prior to the start of operations. Trenching operations can be used to: (a) to encourage future gravel recruitment in a particular location, (b) increase the capacity of a low flow channel, (c) create a deep water habitat by the proposed mining, and (d) to maintain the geomorphology of the gravel bar and the river's banks and channel. After completion of gravel extraction operations, the applicant is required by the Dept. of Fish and Game to allow all sediment to settle in the excavated trench area and to breach the berm in several locations to prevent the creation of fish traps.

Among other things, the previous 1603 Streambed Alteration Agreements for the prior gravel extraction operation did not allow the applicant to: (1) extract gravel below the water table prevailing at the time of the operation under a skimming operation, (2) operate equipment within the flowing river channel

except to start a trenching operation, or (3) extract gravel within 1,000 feet from the Highway 101 (Dr.. Fine) Bridge.

As conditioned herein by this permit and by the County's annually renewable, five-year use permit, the requirements of Special Condition No. I require annual volumetric and environmental assessments to help provide factual data for updating a 21-year-old (1974) gravel replenishment rate study by the California Department of Water Resources for the lower Smith River. That study estimated that the average annual replenishment rate of gravel was around 330,000 cubic yards of material per year. There is a need to periodically update that study by establishing the seasonal replenishment rates for every gravel extraction operation on the lower Smith River so as to better manage these renewable extractive resources and to avoid adverse cumulative impacts to coastal resources.

Resource Issues and Regulatory Background.

The Smith River has 12 gravel bars that have been mined on a regular or periodic basis. Five of these bars are within the coastal zone (i.e. downstream and west of the Dr. Fine or Highway 101 Bridge). There has been an on-going demand for gravel and rock products within Del Norte County because of the construction of the Pelican Bay Prison in the County, and because of the residential and commercial development the prison has induced.

The Smith River and its tributaries are ranked among the most significant anadromous fisheries in Northern California. Chinook salmon, Coho salmon and steelhead trout are among the most important species with regard to commercial and sport fisheries. The project area and the lower Smith River are mainly important for the anadromous fish as a migration route to and from the upstream spawning grounds. Only an insignificant amount of spawning occurs in the lower Smith River.

The gravel extraction projects on the Smith River are interrelated in the sense that all of the gravel bars derive their material from the same source. A report prepared by a Department of Fish & Game Scientific Team examining gravel extraction on the Mad River in Humboldt County describes the interrelationship of gravel mining on a river as follows:

"The gravel resource stored in any reach of a river can be visualized as a bank account. The capital in the account is contained in the bed, and in the bars and banks along the channel. Deposits are made naturally into the account as new gravel is brought in (recruited) from upstream. Natural withdrawals from the account occur as gravel is transported downstream out of the reach by the river. Checks are written on the account as gravel is extracted by man. As with any bank account, if deposits exceed withdrawals, the capital in the account will increase, that is the river will raise its bed (aggrade) and build up the bars. On the other hand, if withdrawals and checks exceed the deposits, the balance in the account will diminish. In the case of a river, this means lowering of the bed (degradation) and widening of the channel."

"The river as a whole can be looked at as a string of serially linked adjacent bank accounts (reaches), whereby the natural withdrawals (outflows) of bed material from each account provide the natural deposits (inflows) to the account immediately downstream. Thus, deposits to any downstream account reflect the cumulative effects of all upstream actions. In particular, if upstream reaches intercept most of the natural gravel recruitment (i.e. the cash flow to downstream accounts is reduced), then deposits to reaches farther downstream can only come by reducing the capital in the intervening accounts, i.e., by eroding the bed and banks."

Thus, gravel extraction projects can contribute cumulatively to erosion of the bed and banks of the river, which in turn can erode adjacent riparian habitat areas and prime agricultural farmlands, interfere with fishery resources, undermine bridge supports, and cause other impacts. Besides the cumulative impacts resulting from changes in the geomorphology of the river, other cumulative impacts resulting from the gravel mining operations can include:
(a) habitat degradation from the installation of gravel processing operations and access roads within environmentally sensitive habitat areas adjacent to the gravel bars, (b) exclusion of recreational use of the river banks, and (c) noise and dust.

Until recently, there had been very little coordinated review of the combined effects of the various gravel mining operations. A gravel mining operation on the river can require the approval of a number of different agencies. Permits granted in the past by the various approving agencies were site specific and granted with little knowledge of the cumulative impacts of gravel mining throughout the lower Smith River.

The initiation of coordinated review for gravel extraction operations on the Smith River began in 1989 under the County's use permit process when the County: (1) required applicants to establish bench marks on or near their bars to be used to determine, over time, changes in the elevation and configuration of the gravel bars and river channels; (2) required applicants to submit annual cross and longitudinal sections of the gravel bars to determine the amount of available material on each gravel bar, as well as the amount of yearly recruitment, (3) established a common February 1st date to annually review/renew all use permits for on-going and proposed gravel extraction operations, and (4) started to issue annually renewable, 5-year, use permits for gravel extraction. The County also began a process of mapping the location of riparian resources along the river using recent aerial photographs. In response, the Coastal Commission also established a 5-year permit with a common February 1st expiration date and an annual administrative review of seasonal mining plans that is similar to Special Condition No. 2 of this permit. As a result of this interagency coordination, information has been gained about the cumulative impacts of the gravel mining operations. At the heart of the strategy is the annual assessment required by the County use permit and Coastal Commission permit which sets a yearly limit on the amount of gravel that may be removed in any given year. The particular method and

location of extraction is determined by the terms and conditions of the County use permit, the State coastal development permit, and the annual Streambed Alteration Agreement from the California Department of Fish and Game. The information that is gained each year helps to identify changes in the location and amount of yearly gravel recruitment, changes in geomorphology of the river (such as its gravel bars, river banks, and river channels), and impacts upon wildlife and fisheries habitats.

Another new development that effects extraction operations on gravel bars is a recent amendment of the U.S. Army Corps of Engineers Clean Water Act Regulatory Program (effective September 24, 1993). The U.S. Army Corps of Engineers (Corps) will be taking a more expanded role in the review of instream gravel extraction operations. Previously, the Corps' regulatory review of many instream gravel extraction operations focused mainly on the installation of channel crossings and stockpiling of material on the river bar. The Corps will now be actively regulating incidental fill related to gravel mining activities.

The combination of the new federal regulatory authority of the Corps, and the standardization and interagency coordination of state and local agency permitting and monitoring requirements, underscore how a comprehensive approach of river management of the Smith River gravel operations may be the only way in which permitted operations will be allowed to continue in the future.

3. <u>Protection of Coastal Waters, Biological Productivity, Water Quality and Environmentally Sensitive Habitat Areas.</u>

The Coastal Act has a number of policies that address the protection of riverine environments from the impacts of gravel mining operations. Coastal Act Section 30233 allows the diking, filing, or dredging of coastal waters, wetlands and estuaries, but only where: (a) there is no feasible, less environmentally damaging alternative, (b) where feasible mitigation measures have been provided to minimize adverse environmental effects, and (c) where the project is limited to one of eight specified uses, such as mineral extraction if not located within an environmentally sensitive area. Coastal Act Section 30231 requires that the biological productivity and the quality of coastal waters be maintained by a variety of means, such as by minimizing the alteration of natural streams and by maintaining natural vegetation buffer areas that protect riparian habitats. Coastal Act Section 30240 requires the protection of environmentally sensitive habitat areas. Lastly, Coastal Act Section 30250(a) requires in applicable part that new development not have significant adverse effects, either individually or cumulatively, on coastal resources.

Depending on the manner in which the gravel operations are conducted, the proposed project could have four potential adverse effects on the natural environment of the lower Smith River. These impacts include: (1) changes in the geomorphology of the river, such as alteration of the river bed, river

channel, or river banks that could lead to increased bank erosion and changes in the course of the river, (2) impacts on fisheries, (3) impacts on wildlife and environmentally sensitive habitat areas, and (4) impacts on the water quality of the river. These potential impacts and their mitigation are discussed separately in the following four sections:

a. River Geomorphology.

Allowing degradation of the river bed and erosion of the river banks as a result of gravel mining operations would be contrary to the sections of the Coastal Act noted above. River bank erosion could lead to a loss of biological productivity and a reduction of water quality of coastal waters through increased sedimentation and turbidity, which would be contrary to the intent of Section 30231. River bank erosion could also lead to the destruction of an environmentally sensitive, riparian habitat area on the banks of the river, which would be contrary to the intent of Section 30240.

Previous gravel extraction operations on the Simpco Bar have been designed, in part, to minimize erosion of the south bank of the river that is opposite the bar by reducing the deflection of flowing river water from the bar to the opposite bank. Seasonal trenching operation serve to: (a) widen the river channel and therefore reduce the velocity and erosion potential of the water, and (b) deepen the river channel and therefore reduce the deflection action of the water. In addition, mitigation of the erosion problem on the south bank of the river that is opposite the gravel bar has also occurred by: (a) replanting the eroding bank with additional riparian vegetation, and (b) providing grazing cattle with an alternate water supply via wells and watering troughs, instead of letting the cattle devegetate and erode the river bank with their hoofs so that they can have free access to the live waters of the river.

Impacts to the river geomorphology can occur if the amount of gravel extracted from a particular part of the river exceeds, over time, the amount of gravel deposited at the site through natural recruitment. Bed degradation and river bank erosion can also occur as a result of the manner in which the gravel is extracted. For example, according to the Fish & Game Scientific Team examining gravel extraction on the Mad River in Humboldt County, if bars are skimmed too flat and too close to the low-water surface, then at slightly higher stages the flowing waters of the river will tend to spread across the bars in a braided condition, which reduces the depth of flow and allows the river channel to migrate rapidly and break apart into a number of shallow channels or threads. The braided condition of a stream or river can also occur where aggradation or the build up of material is a problem. Although such sites will tend to trap gravel which would otherwise move downstream, such sites may also trap or impede fish that migrate up and down the river. In addition, the shallowness of a braided stream or river allows the water to quickly heat up, which is not conducive to the cool water conditions that are needed by migratory fish on the Smith River.

According to Don Kelly, the California Department of Fish and Game warden who issues 1603 Streambed Alteration Agreements for the Smith River gravel bars. the upstream point of a gravel bar plays an especially valuable role in maintaining the geomorphology of the river. Leaving the upstream point of the bar alone aids in the annual deposition of sand and gravel on the bar, which in turn, helps to maintain the present geomorphology of the river's bed, channel, and banks. As the upstream point of the gravel bar rises in elevation from the bed of the river, sediment-carrying waters that flow over the bar in the winter and spring months are slowed by riparian vegetation. This slowing action causes some of the sand and gravel that is in suspension to drop behind the vegetation which is located on the point of the bar. The Commission therefore finds that removal of gravel or vegetation from the upstream point of the bar would not be consistent with the Coastal Act as it would tend to encourage changes to the present geomorphology of the gravel bar, which in turn can lead to adverse changes to the river channel and erosion of the river banks.

Previous gravel extraction operations on the Simpco Gravel Bar have not had a negative impact on that portion of the river which is upstream from the bar, such as the bridge abutments and the pillars of the Highway 101 Bridge which are located 300 to 500 feet east of the upstream point of the bar. Notwithstanding, however, Caltrans staff has requested that no portion of the approved gravel extraction area be closer than 1,000 feet from the bridge due to potential negative impacts to the foundations of the bridge. As submitted, the proposed gravel extraction area is sited so that it is not less than a 1.000 feet from the bridge. This 1.000-foot setback distance is a also a condition of approval in the County use permit and as a condition of approval in the annual 1603 streambed alteration agreement from the California Department of Fish and Game. Since the 1,000-foot setback distance includes all of the upstream point of the bar, the Commission attaches Special Condition No. 3, which states in applicable part that gravel extraction operations shall not be conducted within a 1,000 feet of the Dr. Fine or Highway 101 Bridge.

The applicant proposes to extract a maximum of 75,000 cubic yards of sand and gravel per year from the site for a period of 5 years. As conditioned herein, the yearly amount of the proposed extraction is limited in part by the rate of natural gravel replenishment to avoid degradation of the river bed. Consequently, gravel extraction operations cannot occur in any given season until after the County and the Executive Director of the Commission have reviewed and approved an annual volumetric/environmental assessment of the project area.

As conditioned herein, the proposed gravel extraction operations are designed to ensure that the project will not lead to adverse degradation to the bed, channel, or banks of the river. To help ensure that such degradation does not occur, Special Condition No. 3 sets annual extraction limits for the project area so that the applicant cannot extract more than 75,000 cubic yards of gravel per year, or the amount of available gravel, whichever is the lesser

amount in any given year. The "amount of available gravel" is defined in this permit as the amount of gravel that can be taken from the approved extraction area using either a trenching method that is approved by the Department of Fish and Game, or using a skimming operation that leaves the final surface elevation of the bar above the low water level of the river with a slope of 2 percent or greater that drains towards the main channel of the river. Leaving the bar with a prescribed slope will encourage future gravel recruitment and minimize degradation of the river bed, river channel, and river banks.

Lastly, to ensure that the extraction limits of Special Condition No. 3 are appropriately applied to any changed conditions of the gravel bar each year, Special Condition No. 2 establishes an annual administrative review process to occur prior to each year's extraction operations. In summary, Special Condition No. 2 requires the applicant to submit for the review and approval of the Executive Director an annual report that contains: (a) a copy of all of the necessary permits, approvals, and reviews from local government and other state and federal agencies that are annually required for each season's gravel extractions, and (b) an annual volumetric and environmental assessment of the project site and surrounding area. The Executive Director will approve the report if the report adequately provides the required information and if the proposed gravel extraction for the coming season is consistent with the terms and conditions of this permit, including the seasonal extraction limits established under Special Condition No. 3.

b. Fisheries.

As noted previously, the Smith River and its tributaries are ranked among the most significant anadromous fisheries in Northern California. Chinook salmon, Coho salmon and steelhead trout are among the most important species. The lower Smith River is important for anadromous fish which use the river as a migration route to and from the upstream spawning grounds. This stretch of the river itself is not a significant fish spawning area.

The previously mentioned Chinook salmon, Coho salmon and steelhead trout that use the Smith River are listed by the California Department of Fish & Game as "species of special concern". No other known species of special concern have been found at the project site. Species of special concern are those species that are legally protected by state or federal endangered species laws, or are under consideration for such protection by state or federal resource agencies.

Seasonal gravel extraction operations on north coast streams and rivers only occur during the summer and early fall months, in part because extraction operations at this time of the year will not adversely affect fisheries. However, gravel mining operations need to be out of the river bed before the rainy season to prevent impacts on fisheries. Leaving the river by this time is especially important because runs of the various species of anadromous fish increase in the fall with the rise in river levels and remain at high levels through the early spring.

In its annual 1603 Streambed Alteration Agreements, the California Department of Fish & Game has imposed a seasonal limitation on past gravel extraction operations at this site from August 10th through October 15th to minimize impacts to fisheries. The actual time period for gravel extraction operations on the Smith River can vary from year to year, depending on the low flow conditions of the river. The Commission therefore attaches Special Condition No. 4 which states that extraction shall only be performed during the period that is established by the California Department of Fish and Game in their annual 1603 Streambed Alteration Agreement. The Commission also attaches Special Condition No. 6, a resource protection condition, which requires that: (a) no sand or gravel materials shall be removed from the live waters of the river, (b) no equipment shall operate within, and no material shall encroach upon, the live waters of the river, (c) gravel extraction operations shall not disturb or remove any vegetation located on the banks of the river, and (d) gravel extraction operations shall be conducted within the approved gravel extraction area as directed by the California Department of Fish and Game.

The Commission also attaches Special Condition No. 3, which requires in applicable part that the applicant shall conduct a gravel skimming operation in a manner that will maintain a sloped extraction area, unless otherwise directed by the California Department of Fish and Game in its annual 1603 Streambed Alteration Agreement. Special Conditions No. 3, 4, and 6 are necessary in whole or in part to maintain the biological productivity and water quality of coastal waters and wetlands to protect fisheries and wildlife habitat areas in a manner that is consistent with Section 30231 of the Coastal Act.

c. Environmentally Sensitive Habitat.

In general, the riparian vegetation lining the banks of the lower Smith River is perhaps the single-most important element for the natural environment in the area and is considered by the Commission to be an environmentally sensitive habitat area. The habitat provides a rich and diverse habitat for many living organisms, including: (a) insects, (b) invertebrates, (c) amphibians, such as frogs and salamanders, (d) fish, (e) many species of birds which use the area for foraging, nesting and cover, and (f) various species of mammals, such as river otters, mink, deer, raccoon, striped skunk, gray fox, rodents and rabbits which come to the river to browse and forage. The riparian vegetation along the river also provides migration routes for wildlife, provides river bank stabilization through root penetration, protects water quality, and provides flood protection.

No "special status species" (apart from the fish species previously mentioned) have been found at the site. However, the riparian vegetation along the banks of the river may offer suitable habitat for a state listed endangered species, such as the willow flycatcher, and four "species of special concern," such as the black-shouldered kite, Cooper's hawk, yellow warbler and yellow-breasted chat.

A botanical investigation of the gravel bar and project area was conducted in September of 1995 by Karen Theiss and Associates. The investigation identified several vegetatively different areas on the gravel bar and on the north bank of the river. Each identified area has varying degrees of plant species composition, plant density, plant age, and thus varying degrees of habitat value.

The north bank of the river has woody riparian vegetation that ranges from 2 feet to 30 feet in height and that occupies 40 to 75 percent of the tree or canopy layer. The north bank of the river is shown as "Area III" on the site plan in Exhibit No. 3. The approved extraction area is located away from the banks of the river and therefore will not have any adverse impacts on the riparian habitat area.

"Areas V, VI, VII, and VIII" on the site plan in Exhibit No. 3, show the location of a series of very small and very shallow, fresh water ponds in the seasonal or overflow channel of the river. These areas have some riparian vegetation, but it is not nearly as diverse, dense, and old as the riparian vegetation which is found on the banks of the river. As a result, its habitat is not nearly as valuable as the vegetation that is established on the north bank of the river. On one occasion in the past, the overflow channel was deepened and used as a detour for waters in the main channel to temporarily go around the northeast side of the bar while trenching operations were conducted on the southwest side of the bar. Use of the overflow channel to detour the live waters of the river is not proposed in the current application. Any future plan to use the overflow channel would require an amendment to Permit No. 1-95-44.

"Area IV" on the site plan in Exhibit No. 3 occupies the upper and middle-third of the gravel bar. The vegetation in this area is dominated by Sitka Willow and narrow-leaved willow that is young and fairly sparse because it is subject to annual scour by the flood waters of the river. This portion of the bar is located outside of the proposed gravel extraction area.

The proposed gravel extraction area is shown on the site plan in Exhibit No. 3 and it includes "Area II, Area X, and a 50-foot-wide" strip located along the southwest side of the gravel bar. The vegetation in the proposed gravel extraction area is very young and very sparse because of past gravel extraction operations in this area and the annual scour activity by the flood waters of the river. Less than 15 percent of area II is covered with any woody riparian vegetation, and this vegetation is only 2 to 4 feet in height. Area X and the 50-foot-wide strip do not have any vegetation at all.

According to Karen Kovacs, a biologist at the California Department of Fish and Game, those portions of the gravel bars which are exposed and above the live waters of the river in the summer and early fall months and which do not have much vegetation represent one of the sparsest habitats of the riverine ecosystem in terms of numbers of organisms, biological productivity, and wildlife diversity. The gravel extraction plans proposed by the applicant

include a slightly smaller extraction area than what was previously approved by the Commission under Permit No. 1-89-94. The gravel extraction operations will result in the removal of some small willow trees and some seasonal herbaceous vegetation. As previously mentioned, willow trees are a type of riparian vegetation that is typically associated with an environmentally sensitive habitat area. Section 30107.5 of the Coastal Act defines an "environmentally sensitive area" as:

"Any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments."

In the present case, the limited young willows located within the proposed gravel extraction area do not appear to constitute an environmentally sensitive area as the vegetation does not meet the definition of an "environmentally sensitive area" (ESHA). Given their present location and condition, the young willows do not appear to meet the first part of the two-part definition of ESHA as such vegetation is neither rare nor does it appear to be especially valuable in terms of displaying a great amount of biological productivity. This area of vegetation differs greatly from the mature and diverse riparian vegetation that is found along the banks of the river. This lack of biological productivity is the result of several factors. First, the entire gravel bar is actively scoured by winter and spring waters on a yearly basis, and none of the vegetation on the bar can be considered to be permanent. Second, the age and size of the vegetation is young and small. There is very little diversity of plant species. There is very little diversity of plant structure as the extraction area does not have a fully developed groundcover layer, shrub layer, and understory/canopy tree layer which is typical riparian habitat that is found on the banks of the river. Third, the overall density of the willows is low, and only a small amount of leaf matter is available for foraging and nesting. In addition, staff is not aware of any rare, threatened, or endangered plants or animals that are known to occupy or use these willows during the period that the gravel bar is exposed and above the live waters of the river. Therefore, the limited vegetation at the gravel extraction site is not an ESHA.

d. <u>Water Quality</u>.

The principal impacts of the proposed gravel extraction operation on water quality occur from processing operations that are not part of this permit and which take place outside of the Coastal Commission's permit jurisdiction. Water quality is affected by stormwater runoff from the processing facility, as well as by potential discharges of dissolved petroleum products and admixtures in storm water. As the impacts are generated outside of the Commission's retained jurisdiction, however, the Commission does not have permit jurisdiction to address these impacts. However, it should be noted that Del Norte County imposed conditions to control these impacts in its approval of the project's use permit(s) and reclamation plan.

If properly managed, the proposed gravel extraction operations themselves should not adversely affect the river's water quality. However, excessive or sloppy gravel extraction operations could adversely impact water quality, and ultimately the biological productivity and fishery resources of the river. For example, pushing gravel materials into the water could degrade water quality and biological productivity by increasing the turbidity of the water. Similarly, allowing muddy water to enter the river due to inappropriate gravel trenching operations could create similar impacts. To prevent such occurrences, the Commission attaches Special Condition No. 6 which requires that: (a) no sand or gravel materials be removed from the live waters of the river, (b) no equipment operate within, and no material encroach upon, the live waters of the river, (c) gravel extraction operations not disturb or remove any vegetation located on the banks of the river, and (d) gravel extraction operations shall be conducted within the approved gravel extraction area as directed by the California Department of Fish and Game.

e. Conclusion on Consistency with Sections 30233, 30231, 30240, and 30250(a).

As described above, the project has been conditioned to: (a) minimize alteration of the Smith River, (b) maintain the biological productivity and quality of coastal waters and wetlands, and (c) protect fisheries, wildlife, and environmentally sensitive, riparian habitat areas located within or along the banks of the Smith River. Therefore, the Commission finds the project is consistent with Sections 30231, 30233, and 30250(a) of the Coastal Act.

4. Alternatives.

Coastal Act Section 30233 also requires that for a dredging or fill project to be approved, there must be no feasible less environmentally damaging alternative. A total of four possible alternatives have been identified, including: (1) the no project alternative, (2) obtaining sand and gravel from quarry operations, (3) obtaining sand and gravel from alluvial deposits in the Smith River floodplain, and (4) modifying the proposed project. As explained below, each of these alternatives has problems that make them infeasible and/or more environmentally damaging than the proposed project.

a. The No Project Alternative.

The no project alternative means that no gravel extraction would occur at the site. Without extraction from this site, an equivalent amount of sand and gravel would have to be obtained from other sources to meet the region's need for cement and concrete for the construction of roads, buildings, and other development. Increasing production from other river bar extraction operations would have environmental impacts similar to or greater than the proposed project. The proposed project is located in an area where gravel has historically accumulated and has historically been mined. Mining in many other parts of the river where gravel does not accumulate could lead to changes in geomorphology of the river which in turn, could cause a variety of

adverse impacts such as increased sedimentation, the undermining of bridge supports, and river bank erosion, resulting in the loss of environmentally sensitive, riparian habitat areas and/or prime agricultural lands. The Commission therefore finds that the no project alternative is not a less environmentally damaging alternative to the project as conditioned.

b. Obtaining Sand and Gravel From Quarry Operations.

Excavation from the river could be avoided if an equivalent amount of sand and gravel could be obtained from upland rock quarries. However, there are few quarries in nearby areas where it would be economically feasible to obtain sufficient material, and the quarries that are found in the region are generally in remote locations where water for processing is scarce and the rock is generally of poor quality. The Commission therefore finds that substituting gravel extracted from quarry operations is not a feasible alternative.

c. Obtaining Sand and Gravel from Alluvial Deposits.

Excavation from the river could be avoided if an equivalent amount of sand and gravel could be obtained from alluvial deposits in the flood plain of the lower Smith River. The floodplain of the lower Smith River is underlain by substantial amounts of sand and gravel deposited over thousands of years. However, taking gravel from these alluvial deposits would create its own environmental impacts. Almost all of the lower Smith River floodplain is devoted to uses related to agricultural production. Converting productive coastal agricultural lands to gravel extraction or other uses would not be consistent with Coastal Act policies which call for the protection of agricultural lands. In addition, most of the remaining undeveloped areas of the lower Smith River floodplain is covered with riparian habitat and other environmentally sensitive habitats. Extracting gravel from such areas would result in far more impact to environmentally sensitive habitat than extraction at the project site as conditioned by the permit. The Commission therefore finds that substituting gravel extracted from alluvial deposits in floodplain of the lower Smith River is not an environmentally less damaging alternative.

d. Modifying the Proposed Project, As Conditioned.

Various modifications to the proposed project as conditioned could be proposed in an attempt to reduce the environmental effects. One such modification would be to mine in different areas on the bar, in addition to or in lieu of, the approved gravel extraction site. However, this modification is not likely to result in less impacts than the project authorized herein since most of the area that is outside of the approved gravel extraction area supports ESHA habitat and/or is located within 1,000 feet of the Highway 101 Bridge. As previously discussed, any gravel extraction within 1000 feet of the Highway 101 Bridge could easily change the geomorphology of the river, which in turn could lead to the loss of environmentally sensitive habitat and agricultural lands.

Another modification to the project would be to mine only a portion of the approved extraction area. The project has been designed to provide a variety of mining options, so that annual conditions can be assessed based on the site specific conditions of any given year. Reducing the number of mining areas will reduce the flexibility provided by the project as conditioned to assign the coming season's gravel mining to the areas with the least impact to the geomorphology of the river or riverine ecosystem. Consequently, more environmental impact is likely to result. No other feasible modification to the proposed extraction scheme has been identified. The Commission therefore finds that modifying the proposed gravel extraction area in any other way, other than as conditioned, would not create an environmentally less damaging alternative.

5. Permissible Use For Dredging of Coastal Waters.

Gravel extraction within a river bed is a form of dredging within a wetland. Coastal Act Section 30233, states in part, that the diking, filling, or dredging of open coastal waters, wetlands, estuaries, and lakes shall be allowed for only certain limited purposes. Section 30233(a)(6) allows dredging for mineral extraction, except in environmentally sensitive areas. As discussed and conditioned herein, no part of the project will be conducted within an environmentally sensitive area. The Commission therefore finds that the project is a permissible use under Section 30233(a)(6) of the Coastal Act.

6. Public Access.

The project is located between the first public road (Fred Haight Drive) and the sea (the Smith River is considered to be an arm of the sea in this area). Coastal Act Section 30210 requires that maximum public access opportunities be provided when consistent with public safety, private property rights, and natural resource protection. Coastal Act Section 30211 requires that development not interfere with the public's right of access to the sea where acquired through use. Coastal Act Section 30212 requires that public access from the nearest public roadway to the shoreline and along the coast be provided in new development projects, except in certain instances, as when adequate access exists nearby. In applying Sections 30210, 30211, and 30212, the Commission is limited by the need to show that any denial of a permit application based on those sections, or any decision to grant a permit subject to special conditions requiring public access, is necessary to avoid or offset a project's adverse impact on existing or potential public access.

Four shoreline access points presently exist within the coastal zone and the lower Smith River (i.e. downstream and west of the Dr.. Fine or Highway 101 Bridge. From west to east, these access points are located at: (1) the southerly end of the Mouth of the Smith River Road, (2) the Ship-a-Shore resort, (3) the southerly end of Sarina Road, (4) and the County-owned, Smith River fishing access point access from the Bailey Bar. The proposed project is located about one-half mile wast of the County-owned, Smith River fishing access point near the Bailey Bar. There is no evidence of historic public access use within the project area.

The Commission therefore finds that adequate public access exists nearby and that the applicant need not make an offer to dedicate public access to be consistent with Section 30212(a). Furthermore, gravel extraction operations have been occurring at the site for many years. The continued extraction of gravel as authorized by this permit will not create any additional burdens on public access than have existed in the past. The project will not create any new demands for fishing access or other public access use.

Therefore, the proposed project does not appear to have any adverse effect on public access that would be significant enough to warrant requiring public access. The Commission finds that public access is not warranted for this project and that the project as proposed without new public access is consistent with Sections 30210 and 30212.

7. Coastal Recreation.

Coastal Act Section 30220 states in applicable part the coastal areas suited for water-oriented recreational activities shall be protected for such uses.

The lower Smith River has significant recreational boat traffic during the gravel extraction season. The project will not obstruct existing recreational boat traffic since the gravel extraction area does not include the live waters of the river and since removal of the gravel will not require crossing the river. To ensure that the project's operations are kept out of the live waters of river, the Commission attaches Special Condition No. 6, which requires in applicable part that no equipment shall operate within, and no material shall encroach upon, the live waters of the river channel existing at the time of operations.

8. State Lands Commission Review.

The project is located in the bed of the Smith River, a navigable river, where the State of California may hold a fee ownership over lands and waters generally located below the ordinary high water mark of the river as they last naturally existed. In addition, the entire river between the ordinary high water marks may be subject to a public trust easement. Any such easement and fee-owned lands are under the jurisdiction of the State Lands Commission.

The Commission therefore attaches Special Condition No. 1, which requires the applicant to submit to the Executive Director a final written determination that all necessary approvals have been obtained from the State Lands Commission prior to issuance of the coastal development permit. The Commission attaches this condition to ensure that the applicant has obtained all the necessary property rights to carry out the project.

9. Department of Fish and Game Review.

The project requires an annual 1603 Streambed Alteration Agreement from the California Department of Fish and Game. The applicant has not yet received an

agreement for the 1996 gravel extraction season or for any future extraction season. Therefore, to ensure that the project area reviewed by the Department of Fish and Game is the same project area that was reviewed under this permit by the Commission, and to ensure that the requested amount of gravel extraction does not exceed the seasonal extraction limits established under Special Condition No. 3, the Commission requires as part of Special Condition No. 2 that prior to commencing each gravel extraction season, the applicant submit a copy of a 1603 agreement from the Department of Fish and Game that is valid for that season.

10. U.S. Army Corps of Engineers Review.

The project is within and adjacent to a navigable waterway and is subject to review by the U.S. Army Corps of Engineers (Corps). Pursuant to the Federal Coastal Zone Management Act, any permit issued by a federal agency for activities that affect the coastal zone must be consistent with the coastal zone management program for that state. Under agreements between the Coastal Commission and the U.S. Army Corps of Engineers, the Corps will not issue a permit until the Coastal Commission approves a federal consistency certification for the project or approves a permit. To ensure that the project ultimately approved by the Corps is the same as the project authorized herein, the Commission requires as part of Special Condition No. 2 that prior to commencing each gravel extraction season, the applicant demonstrate that it has all necessary permits from the U.S. Army Corps of Engineers for the proposed gravel extraction to be performed that season.

11. Permit Expiration.

As noted in the "Resource Issues and Regulatory Background" finding of this report, regulation of gravel mining operations along the Smith River has been evolving over the last few years and is likely to continue to evolve in the future. The U.S. Army Corps of Engineers has recently been given greater regulatory authority over instream gravel extraction operations and is currently developing the approach the agency will take to exercise its new authority. An interagency instream gravel mining committee at the State level is developing new monitoring standards. Therefore, to enable the Commission to review future mining at the applicant's site in light of the new information and changed circumstances that may develop over the next few years, the Commission attaches Special Condition No. 5, which states that the permit shall expire on February 1, 2001.

The Commission notes that it may be necessary for the applicant to amend this authorization even before expiration of the permit on February 1, 2001. The Smith River is a dynamic environment that can change dramatically in the course of a single winter due to extreme high water flows. Standard Condition No. 3 requires that the project adhere to the project plans submitted with the application, as modified by the conditions of the permit. In the event that changes in the riverine environment necessitate changes to the extraction area and/or reclamation plans for the project, such changes will require further

review by the Commission. In addition, Special Condition No. 7 requires that any proposal to take more than the maximum permitted 75,000 cubic yards of materials, to take more than the amount of available gravel, to increase the size of the project area, or to change any of the conditions of this permit shall require an amendment to this permit.

12. Del Norte County LCP.

The proposed gravel extraction project is located within the Commission's retained coastal development permit jurisdiction. Therefore, the standard of review that the Commission is applying in its consideration of the application is the Coastal Act. Nonetheless, the project is also consistent with Del Norte County's Local Coastal Program.

The County has rezoned the land and water areas located immediately adjacent to and within the bed of the lower Smith River from RCA-1 to RCA-2(r) and (e), meaning Designated Resource Conservation Area, riparian and estuary.

The RCA-2(r) designation applies to the riparian plant community that is found on the banks of the river. Except for nature study, fish and wildlife management, and other minor development, gravel extraction operations are not allowed within an RCA-2(r) area because these areas are considered to be environmentally sensitive.

The RCA-2(e) designation applies to the gravel bars that are located within the bed of the lower Smith River. Subject to obtaining a County use permit, Section 21.11A.040(D) of the County's coastal Zoning Ordinance allows gravel extraction operations within a RCA-2(e) zone where: (a) the proposed operations are in accordance with the provisions of the Coastal Element of the County's General Plan, (b) there is no feasible less environmentally damaging alternative, and (c) feasible mitigation measures have been provided to minimize adverse environmental effects.

The provisions of the County's Coastal Element of its General Plan (i.e. Extraction Policies No. 6, 10, and 12 of the LUP) prohibit gravel extraction operations in areas where the operations would significantly bar, alter, or destroy wildlife habitat and fisheries. In so doing, the provisions also recognize that alterations of natural river channels through straightening, widening, or deepening can have adverse impacts on the habitat qualities of estuarine systems. Thus, proposed gravel extraction operations that are likely to result in changes to the geomorphology of the river are also likely to result in adverse impacts on environmentally sensitive habitat areas that are associated with the river. As conditioned herein, this permit is consistent with County policy to prohibit gravel extraction operations over the upstream point of a gravel bar or within 1,000 feet from the Highway 101 Bridge. As previously discussed, there are no feasible less environmentally damaging alternatives to the proposed project and feasible mitigation measures have been attached as special conditions of approval. In its action to approve the use permit for the project, Del Norte County found that the

proposed project was consistent with the Del Norte County LCP. The Commission concurs with this determination.

13. California Environmental Quality Act (CEOA).

Section 13096 of the California Code of Regulations requires Commission approval of Coastal Development Permit applications to be supported by a finding showing the application, as conditioned by any conditions of approval, to be consistent with any applicable requirements of the California Environmental Quality Act (CEQA). Section 21080.5(d)(2)(i) of CEQA prohibits a proposed development from being approved if there are feasible alternatives or feasible mitigation measures available which would substantially lessen any significant adverse impact which the activity may have on the environment.

The proposed project has been conditioned in order to be found consistent with the policies of the Coastal Act that restrict the filling and dredging of coastal waters and require the protection of the biological productivity of coastal waters. Mitigation measures, including requirements that: (1) limit extraction to avoid migratory fish, and extraction under conditions that could lead to changes in the river geomorphology, (2) call for the preparation of annual volumetric assessments and environmental surveys of any changed conditions in the river and its habitat values to be reviewed by the Commission and other agencies, will minimize all adverse environmental impacts. As conditioned, there are no feasible alternatives or feasible mitigation measures available, beyond those required, which would substantially lessen any significant adverse impact which the activity may have on the environment. Therefore, the Commission finds that the proposed project, as conditioned to mitigate the identified impacts, is the least environmentally damaging feasible alternative and can be found consistent with the requirements of the Coastal Act and to conform to CEQA.

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ATTACHMENT A

Standard Conditions

- 1. Notice of Receipt and Acknowledgment. The permit is not valid and development shall not commence until a copy of the permit, signed by the permittee or authorized agent, acknowledging receipt of the permit and acceptance of the terms and conditions, is returned to the Commission office.
- 2. <u>Expiration</u>. If development has not commenced, the permit will expire two years from the date on which the Commission voted on the application. Development shall be pursued in a diligent manner and completed in a reasonable period of time. Application for extension of the permit must be made prior to the expiration date.
- 3. <u>Compliance</u>. All development must occur in strict compliance with the proposal as set forth in the application for permit, subject to any special conditions set forth below. Any deviation from the approved plans must be reviewed and approved by the staff and may require Commission approval.
- 4. <u>Interpretation</u>. Any questions of intent of interpretation of any condition will be resolved by the Executive Director or the Commission.
- 5. <u>Inspections</u>. The Commission staff shall be allowed to inspect the site and the development during construction, subject to 24-hour advance notice.
- 6. <u>Assignment</u>. The permit may be assigned to any qualified person, provided assignee files with the Commission an affidavit accepting all terms and conditions of the permit.
- 7. <u>Terms and Conditions Run with the Land</u>. These terms and conditions shall be perpetual, and it is the intention of the Commission and the permittee to bind all future owners and possessors of the subject property to the terms and conditions.





