# DELINEATION OF WATERS OF THE UNITED STATES

# **IONE BAND OF MIWOK INDIANS**

CASINO PROJECT

**JULY 2004** 

Lead Agency:

U.S. Department of the Interior, Bureau of Indian Affairs Pacific Region, 2800 Cottage Way, Room W-2820 Sacramento, CA 95825-1846

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Prepared For:

U.S. Department of the Interior, Bureau of Indian Affairs Pacific Region, 2800 Cottage Way, Room W-2820 Sacramento, CA 95825-1846

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### **DELINEATION OF WATERS OF THE U.S., 230 ± ACRE IONE CASINO STUDY AREA, AMADOR COUNTY, CALIFORNIA**

#### **JULY 2004**

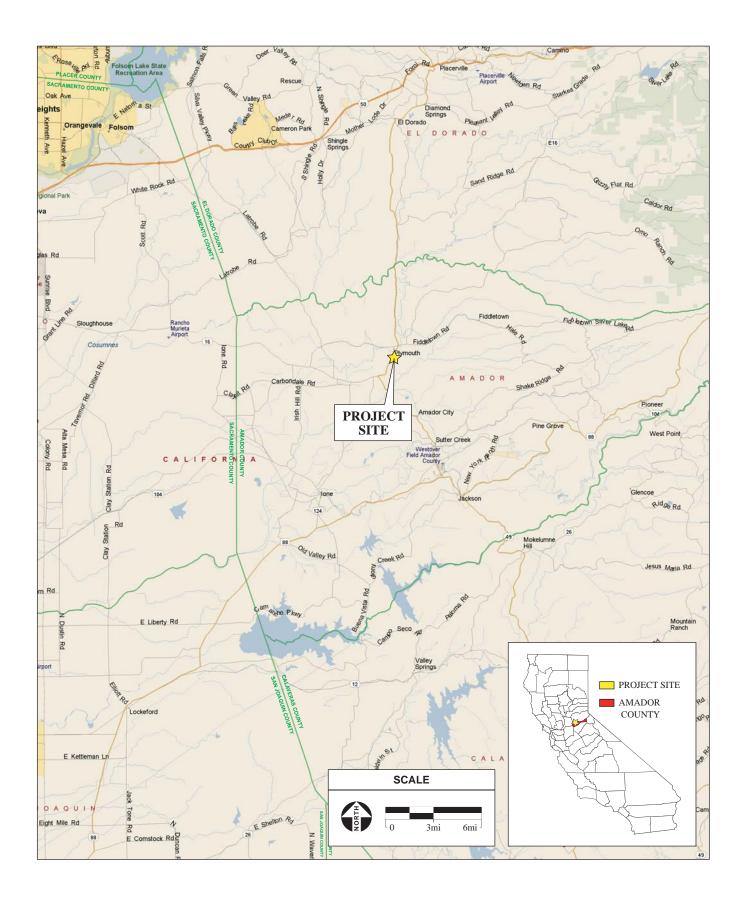
#### **1.0 INTRODUCTION**

Analytical Environmental Services (AES) has conducted a formal delineation of "waters of the U.S." occurring within the 230 ± acre Ione Casino study area. The study area includes 10±-acres of land located within the City of Plymouth, while the remaining acres are located on unincorporated land within Amador County (**Figure 1**). This location is found within portions of Sections 14 and 15 of Township 7 North, Range 10 East, Mount Diablo Baseline and Meridian, on the "Amador City, Calif." U.S. Geological Survey 7.5-minute quadrangle map (**Figure 2**). The project area is shown on an aerial photograph in **Figure 3**.

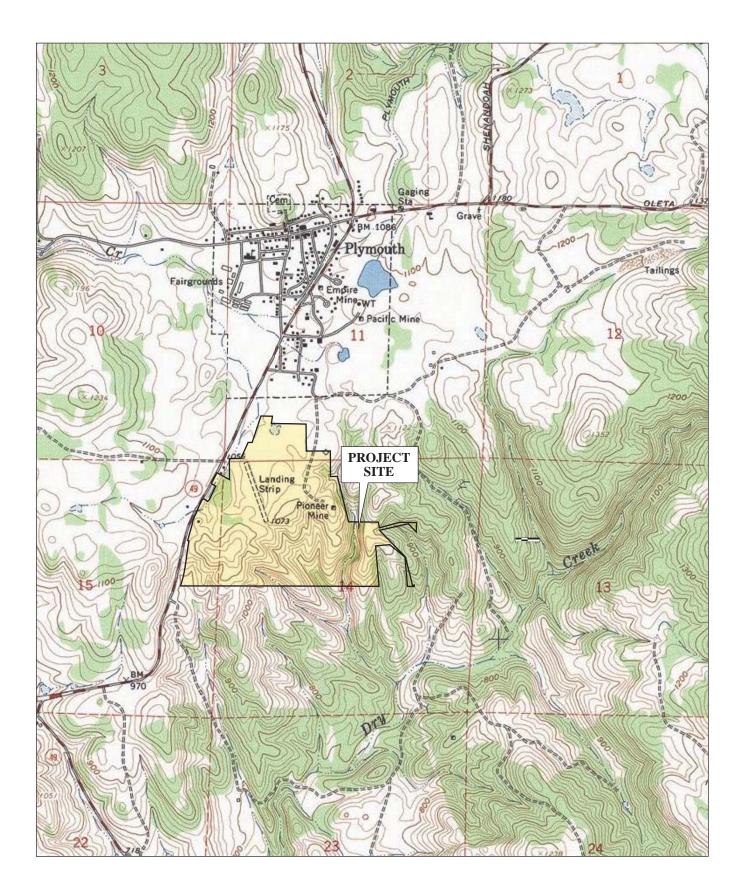
#### 2.0 ENVIRONMENTAL SETTING

Amador County is moderately moist and the average annual temperature is approximately 65 °F, with temperatures ranging from below freezing to over 100°F. The region is in climate Zone 7 – "Great Valley and Surrounding Low Mountains," characterized by marked seasons of hot, dry summers, and moderately cold, wet winters, with most of the precipitation falling during the six months of winter (Sketchley, 1965; Hickman, 1993). Annual precipitation totals 25-30 inches, and the prevailing wind is westerly, averaging less than 10 miles per hour.

The study area is located in the foothills of the western slope of the Sierra Nevada, at an elevation ranging from 900 to 1,150 feet above sea level. The geology of the surrounding area (Amador County) is dominated by steeply dipping, faulted and folded metamorphic rocks that have been intruded by several types of igneous rocks, and overlaying the bedrock in many places are mantles of river gravel and volcanic debris (Sketchley, 1965). The general trend of ridges and rock formations is northwest to southeast, and drainage is generally to southeast. The northern portion of the county lies within the Cosumnes River basin, and the southern portion, including the study area, lies within the Mokelumne River basin. The geology in the project vicinity consists of metasedimentary rocks of the Calaveras Complex such as slate, metamorphosed sandstone, conglomerate, and some limestone and volcanic rock. The sediments that formed these rocks were deposited in an ocean basin during the

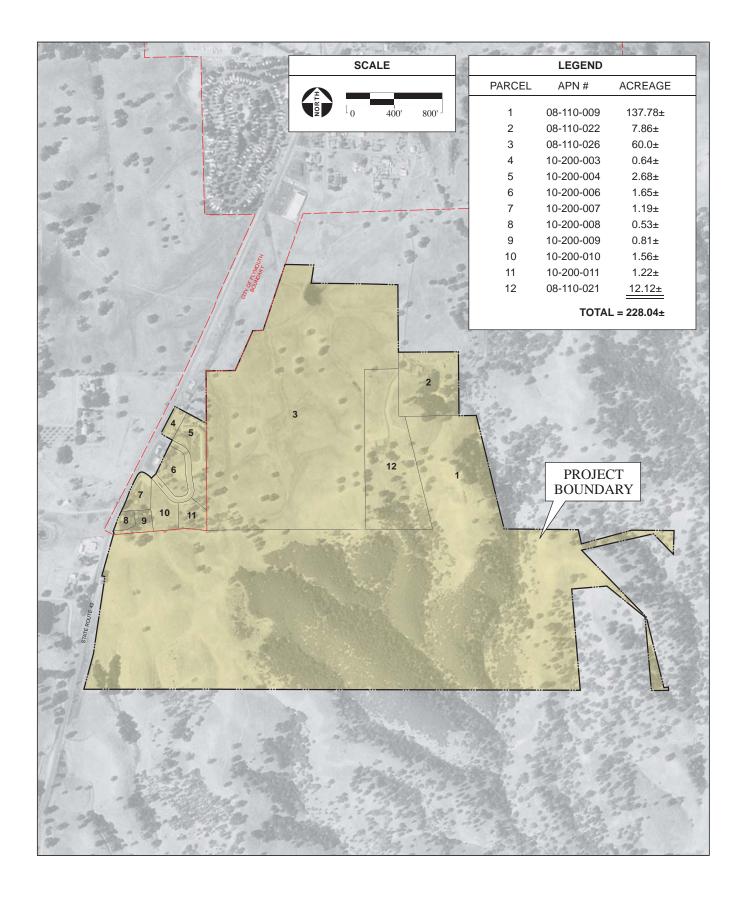


- Ione Band of Miwok Indians Casino Project Waters of the US / 203525



SOURCE: "Amador City, CA" USGS 7.5 Minute Topographic Quadrangle, Sections 11, 14, & 15, T7N, R10E, Mt. Diablo Baseline and Meridian ; AES, 2004 - Ione Band of Miwok Indians Casino Project Waters of the US / 203525 ■

**Figure 2** Site and Vicinity



Upper Paleozoic Period and were then intensely folded, sheared, heated, and fractured by processes that created the Sierra Nevada. The Calaveras Complex is highly fractured and has exposures at the project site in stream bottoms. This fractured bedrock serves as a shallow groundwater aquifer.

#### 3.0 METHODOLOGY

Prior to conducting the field delineation the following information sources were reviewed:

- USGS "Amador City" 7.5 minute topographic quadrangle
- Color aerial photography of the study area and vicinity
- Tentative Natural Resources Conservation Service soil survey maps and unit descriptions
- Hydric soil information obtained from the Natural Resources Conservation Service

The field delineation was conducted by AES biologists G. O. Graening, John Howe, and John Miller on November 19 and 25, 2003, and by Paul Garcia and John Miller on January 16, 2004. The *Corps of Engineers Wetlands Delineation Manual* (Environmental Laboratory 1987) was used as the standard for determining if specific areas qualify as wetlands subject to the provisions of the Clean Water Act. U.S. Army Corps of Engineers' regulations (33 CFR 328) were used to determine the presence of jurisdictional "waters of the U.S." other than wetlands.

The entire study area was assessed in such a manner as to view all areas to the degree necessary to determine the presence or absence of jurisdictional features. Data collection points were chosen at representative locations and detailed information on vegetation, soils, and hydrology characteristics were taken for each data point. Plant nomenclature follows *The Jepson Manual: Higher Plants of California* (Hickman 1993). The 1988 *National List of Vascular Plant Species that Occur in Wetlands, California Region 0* (Reed 1988), was used to determine the status of observed plants as wetland indicator species. A standard Munsell<sup>®</sup> soil color chart was used to determine soil matrix and mottle colors.

Vernal pools were delineated with using a combination of out-of-season floristic data (presence or absence of patches of persistent plant skeletons of vernal pool endemic species) and topographic position since the site soils were generally thin and uniformly of high chroma, underlain by near-surface slate bedrock. Disturbance of the site included active grazing and historic mining activities, and remnant graded areas of an abandoned landing strip. The only areas meeting all three mandatory wetland criteria were beds of hydrophytes adjacent to a blue-line stream on the site. The floor of old stock ponds and blocked swales, and a leakage area at the base of one of the dams on the property, possessed hydrophytic vegetation and wetland hydrology, but generally lacked hydric soils. Instead

these sites had thin soils only a few inches thick that were underlain with slate bedrock, sometimes iron stained or with lightly discolored rocky clay chunks weathered from indurate slate slabs. Intermittent watercourses were assessed for indicators of two-year flood-flow such as down-cutting, microterraces, gravels, sands, and cobbles.

Data sheets which document the basis for determining if suspect features qualify as jurisdictional "waters of the U.S." were completed for representative locations and are included in the **Appendix** of this report. The boundaries of all "waters of the U.S." located in the study area were measured in the field and recorded on a 1" = 200' aerial photograph. These data were then digitized to calculate acreage and to produce the "waters of the U.S." delineation maps.

#### 4.0 **RESULTS**

#### 4.1 UPLAND HABITATS

#### ANNUAL GRASSLAND

The northeastern portion of the study area is this vegetated by annual grassland (Analytical Environmental Services, 2004). Plant species of these areas found during site visits include creeping bent (*Agrostis stolonifera*), silver European hairgrass (*Aira caryophyllea*), sweet vernal grass (*Anthoxanthum odoratum*), wild oat (*Avena fatua*), cultivated oat (*Avena sativa*), California brome (*Bromus carinatus*), ripgut brome (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), yellow starthistle (*Centaurea solstitialis*), dogtail fescue (*Cynosurus echinatus*), filaree (*Erodium cicutarium*), California fescue (*Festuca californica*), tarweed (*Hemizonia fasciculata*), meadow barley (*Hordeum brachyantherum*), Mediterranean barley (*Hordeum marinum* ssp. gussoneanum), weed barley (*Hordeum murinum* ssp. *leporinum*), hedge mustard (*Sisymbrium officinale*), milk thistle (*Silybum marianum*), winter vetch (*Vicia villosa*), and Zorro fescue (*Vulpia myuros*).

#### CHAPARRAL

Within the southern half of the project area chaparral occurs (Analytical Environmental Services, 2004). The chaparral within the project area is a chamise chaparral. Plants identified in these areas during site visits include chamise (*Adenostoma fasciculatum*), manzanita (*Arctostaphylos manzanita*), wood fern (*Dryopteris arguta*), yerba santa (*Eriodictyon californicum*), pearly everlasting (*Anaphalis margaritacea*), sticky monkey flower (*Mimulus aurantiacus*), and interior live oak (*Quercus wislizenii*).

#### OAK SAVANNA

Oak savanna comprises portions of the project area (Analytical Environmental Services, 2004), and it is often interspersed with annual grassland. The oak savanna of the site is dominated by blue oak (*Quercus douglasii*). Plants identified in these areas during site visits included primarily blue oak and the same dominant annual grasses identified in the previous paragraphs (Analytical Environmental Services, 2004).

#### OAK WOODLAND

Oak woodland is also present in the project area, and is dominated by blue oaks but also includes scattered interior live oaks, black oaks (*Quercus kelloggii*), gray pines (*Pinus sabiniana*), and ponderosa pines (*Pinus ponderosa*). Understory vegetation included poison oak (*Toxicodendron diversilobum*), manzanita (*Arctostaphylos manzanita*), toyon (*Heteromeles arbutifolia*), dogtail fescue, and goldenback fern (*Pentagramma triangularis* ssp. *triangularis*) (Analytical Environmental Services, 2004).

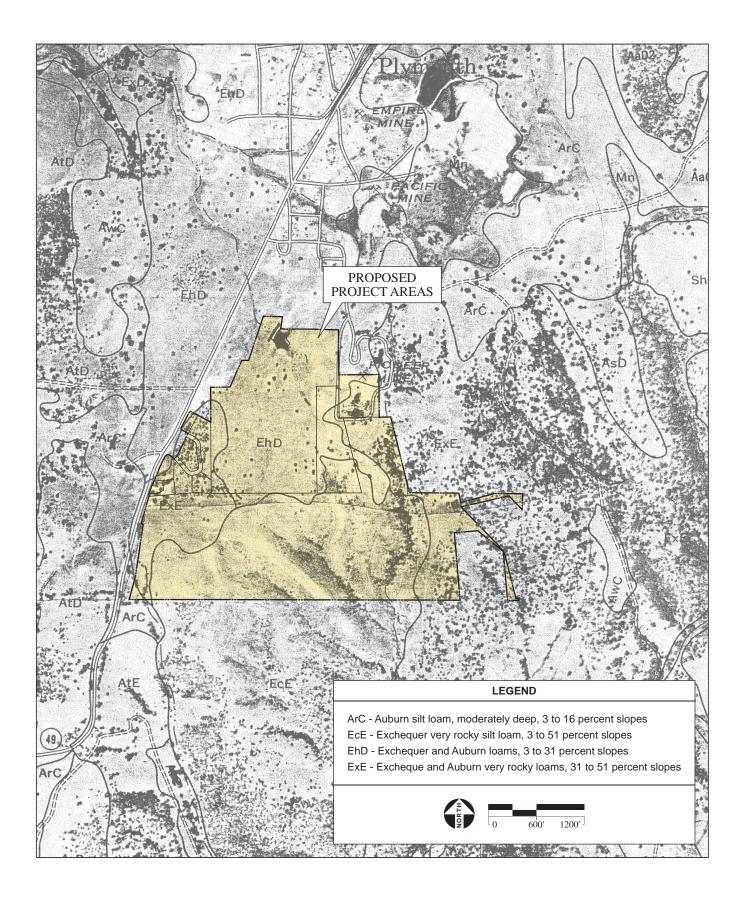
#### RIPARIAN WOODLAND

Riparian or moisture-loving plant habitat occurs in canyons and arroyos along rivers and streams and often forms scrub or woodland. Deciduous trees, shrubs, grasses and forbs dominate the riparian woodland of the site even though rivers and perennial streams are absent. Riparian woodlands occur in association with the ephemeral and intermittent drainages in Parcel 1. All but one of the riparian areas support a canopy dominated by interior live oaks, which intergrades with the adjoining chaparral. Dominant plant species identified in these areas during site visits included interior live oak, California buckeye (*Aesculus californicus*), toyon, California black walnut (*Juglans californica*), holly-leaf redberry (*Rhamnus ilicifolia*), and poison oak.

The deep eastern drainage on the site is steep sided with well-developed woodland equivalent to mixed oak-pine riparian woodland. Plant species identified in this area included interior live oak, black oak (*Quercus kelloggii*), California black walnut, gray pine, ponderosa pine, and red willow (*Salix laevigata*) (Analytical Environmental Services, 2004).

#### 4.2 SOIL TYPES

The soils of the project site consist of soils of the Auburn-Exchequer association (**Figure 4**). Soils of this association are characteristically very shallow to moderately deep, rocky or gravelly soils from



metabasic rocks and metasedimentary slate and schist. Vertical outcrops of schistose rocks occupy 20 to 50 percent of the surface in some areas with abundant rock fragments visible in profile. Exchequer soils adjoin Auburn soils (Sketchley, 1965).

The Auburn series of the association consists of well-drained, shallow to moderately deep soils formed from metabasic igneous rock and metasedimentary rock. The subsoil in the Auburn series ranges in color from yellow-red, reddish brown to brown. The Exchequer series of the association consists of excessively drained, very rocky, very shallow soils that are slightly acidic. Surface soil is granular, friable and slightly acidic very rocky silt loam. The soil color varies from dark brown, brown to grayish brown with a predominantly shallow depth to bedrock, about 6 inches in most places (Sketchley, 1965).

#### 4.3 HYDROLOGY

Portions of the site within the watershed of Dry Creek are characterized by dissected topography, which supports ephemeral to intermittent drainages. Surface water was observed flowing on January 16, 2004, but no flows were evident late the previous year. However, evidence of flow may be deduced from the rounding of angular sheets of slate that litter the floor of each drainage on the site. An excavated, disturbed intermittent stream runs parallel to State Highway 49, which was flowing in mid-January.

Slate bedrock is exposed at or near the surface on much of the site, and the near vertical bedding planes and indurate nature of the rock impedes groundwater recharge. Localized ponding was observed on January 16, 2004 in natural and man-made depressions on the site, especially in areas having thin soil and near-surface parent material. Hydrologic control is afforded by an abandoned landing strip on the site, which acts as a dam causing localized ponding in two areas. Several excavated cattle ponds occur on the site. All were filled with water by January 16, 2004. In addition, a constructed detention basin occurs adjacent to State Highway 49, and this had about six-inches of ponded water when the site was visited in mid-January.

Since the bulk of the site is on top of the hills on the south outskirts of the town of Plymouth, most of the hydrology emanates from precipitation, and there is little, if any runoff entering the property from surrounding lands.

#### 4.4 WATERS OF THE U.S.

The United States Fish & Wildlife Service has inventoried several wetlands in the area as part of its National Wetlands Inventory (NWI). These include palustrine emergent and unconsolidated wetlands

that were natural and/or impounded. All of the stock ponds and one of the seasonal ponds (i.e. the pond formed from the abandoned aircraft runway fill) appeared on the NWI (**Figure 5**).

The AES field survey confirmed the presence of the seasonal wetlands that were identified in the NWI, including cattle ponds, a detention basin, intermittent and ephemeral streams, vernal pools and swales; and, in addition, mapped additional potential waters of the U. S. features. These features are discussed below, appear as images (**Figure 6-1 and 6-2**), are mapped in **Figure 7**, and are documented by USACE data forms that appear in the **Appendix**.

#### Seasonal Wetlands

Seasonal wetlands are characterized by vegetation that is typically adapted to seasonal flooding and varying levels soils saturation. These areas are typically occurring either adjacent to streams or freshwater wetlands where seasonal flooding occurs, or in areas that have seasonally saturated soils either due to pooling of seasonal rains or due to shallow groundwater conditions. These features include cattle ponds, a detention basin, a modified drainage, vernal swales/pools, and other seasonal wetlands (**Figures 6-1, 6-2, and 7**).

#### CATTLE PONDS

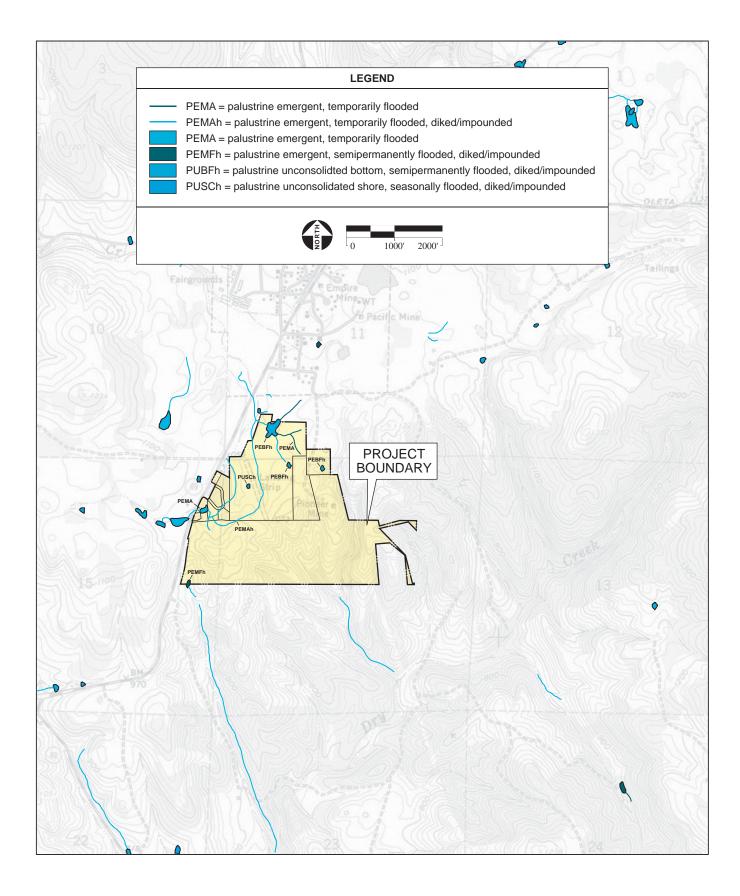
Four cattle ponds occur on the project site. A cattle pond was observed near the southwest corner of Parcel 1. This feature is fed by two swales that capture runoff from nearby Highway 49 and the surrounding landscape. The pond and its perimeter are devoid of vegetation, except for scattered willow weed (*Polygonum lapathifolium*). This feature is a result of excavation and damming to create an impoundment suitable for stock watering (**Figures 6-1, 6-2, and 7**).

Another cattle pond is located near the northern boundary of Parcel 3. The impoundment consists of open water that varies in depth through out the season and a peripheral area that is saturated long enough through the wet season to support a thick herbaceous layer dominated by spikerush (*Eleocharis macrostachya*). This feature is a result of excavation and damming of a swale for purposes of stock watering. Below the dam face a small seep exists. The seep is vegetated with spikerush and Baltic rush (*Juncus balticus*) (**Figures 6-1, 6-2, and 7**).

A third cattle pond occurs along the eastern boundary of Parcel 3. No vegetation was observed in association with this pond. The fourth cattle pond is at the edge of the central parcel.

#### DETENTION BASIN AND INTERMITTENT DRAINAGE

A detention basin exists along the western boundary of Parcel 7. This feature appears to collect runoff from this portion of the site and channel it into a culvert that daylights just north of the gas





#### Photograph 1

Intermittent stream in an excavated ditch fronting State Highway 49.



#### Photograph 2

Seasonal wetland formed when the abandoned aircraft runway in the center of the image, blocked a vernal swale.



#### Photograph 3

Large stock watering pond at the northwest corner of the project site.



## **Photograph 4** Stock watering pond in the northwest corner of the project site.





**Photograph 5** Pond showing its position relative to the abandoned aircraft runway.

Photograph 6 Vernal pond and swale.



Photograph 7 Cattle Pond

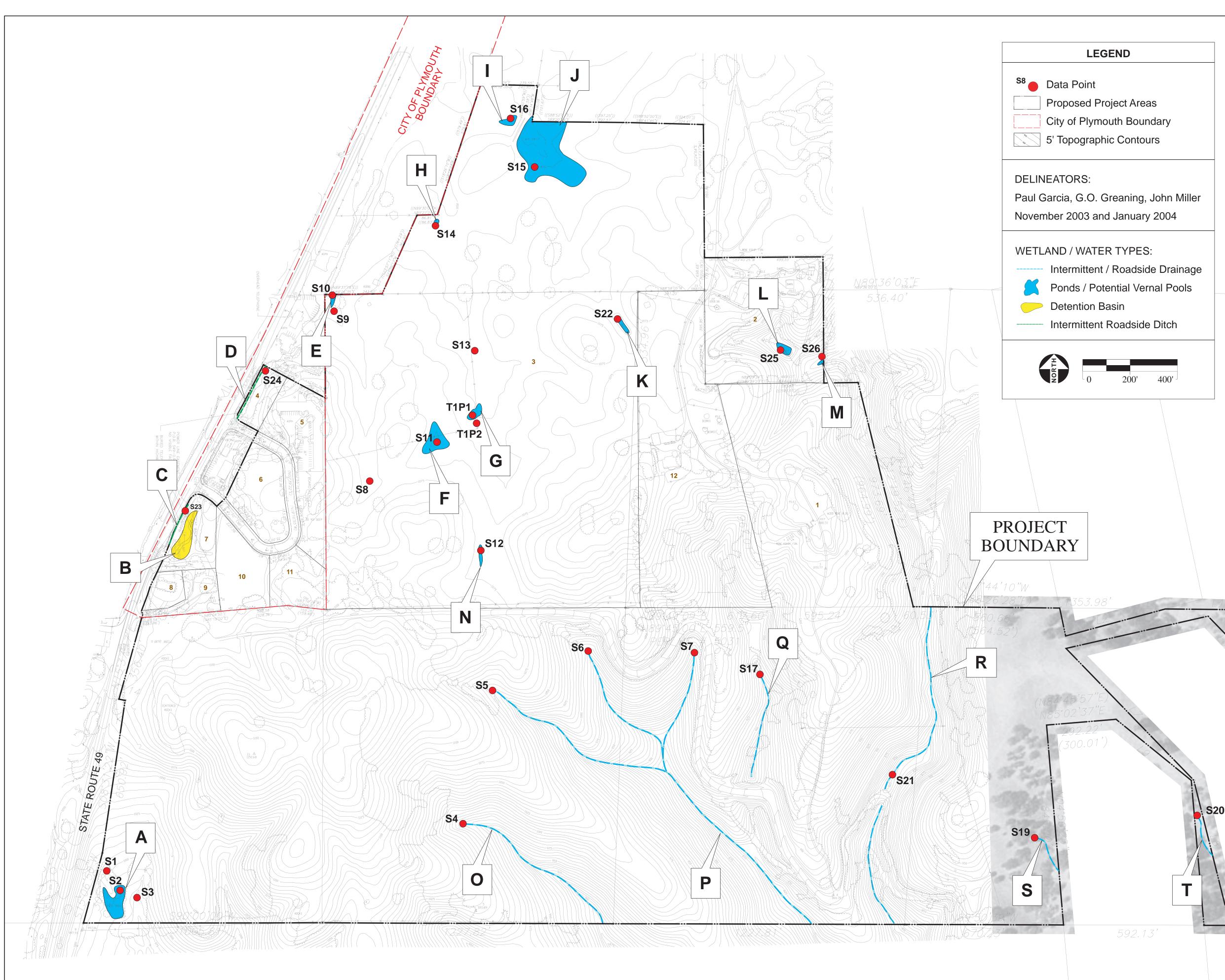


#### Photograph 8

Head of a tributary to Dry Creek. Water flows out of a spring where down cutting of a channel first became discernable.

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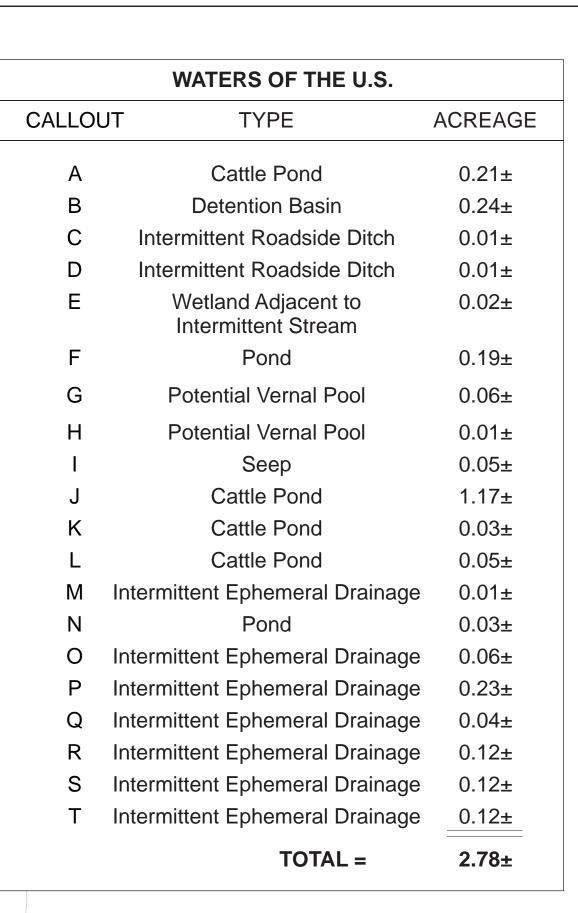
**Figure 6-2** Site Photographs



SOURCE: USGS Aerial Photograph, 8/16/1998 ; American Aerial Mapping, 2003 ; AES, 2004







PARCELS						
PARCEL	APN #	ACREAGE				
1	08-110-009	137.78±				
2	08-110-022	7.86±				
3	08-110-026	60.0±				
4	10-200-003	0.64±				
5	10-200-004	2.68±				
6	10-200-006	1.65±				
7	10-200-007	1.19±				
8	10-200-008	0.53±				
9	10-200-009	0.81±				
10	10-200-010	1.56±				
11	10-200-011	1.22±				
12	08-110-021	12.12±				
	ΤΟΤΑΙ	L = 228.04±				

Ione Band of Miwok Indians Casino Project Waters of the US /203525  $\blacksquare$ Figure 7

Delineation of Waters of the United States (Revised 10/26/2004)

station and continues as a roadside ditch. The ditch is shown as an intermittent drainage on the USGS quadrangle map. This portion of the drainage appears to be a modification of a historic drainage that once flowed through the western portion of Parcel 4 paralleling State Route 49. Dominant plants identified during site visits include broadleaf cattail (*Typha latifolia*), and Himalaya blackberry (*Rubus discolor*). Plants identified within the drainage include broadleaf cattail, curly dock (*Rumex crispus*), red willow (*Salix laevigata*), and arroyo willow (*Salix lasiolepis*).

#### INTERMITTENT AND EPHEMERAL DRAINAGES

The floor of ephemeral drainages is littered with partially rounded slate fragments and slabs, and vegetated with non-native grasses and forbs and often shaded by the canopies of the riparian shrubs and trees (Analytical Environmental Services, 2004). The first evidence of flow in these channels is a down-cut channel and seep point or spring at the head of the deeper canyons (**Figure 6-2**).

#### VERNAL POOLS

The area in the vicinity of the abandoned aircraft runway (visible on the USGS quadrangle map) in Parcel 3 has a vernal pool and seasonal pond (see next (**Figures 6-1, 6-2, and 7**). These areas were either saturated to the surface or ponded water on January 16, 2004, but were completely dry two month's earlier.

Vernal pools of the Plymouth site formed in thin subsoil, only a few inches thick; weathered from shallow, indurate slate bedrock, often in tilted or near vertical bedding planes. Evidently, the shallow slate bedrock blocks infiltration of surface water for a period of time long enough the support the growth of vernal pool indicator species and obligate wetland plants in ponded microsites. Plants identified at the time of the surveys included spikerush (*Eleocharis macrostachya*), Vasey's branching coyote thistle (*Eryngium castrense*), and pillwort (*Pilularia americana*). The spring flora of these pools has not yet been studied (**Appendix; Figures 6-1, 6-2, and 7**).

#### OTHER SEASONAL WETLANDS

Two other areas of seasonal wetlands exist within Parcel 3. One of these features is a seasonal wetland that the abandoned aircraft runway grade formed by impounding water on the uphill side of it. This feature pools water during the winter and is dominated by spikerush. The other area consists of two small wetland areas near the western boundary of Parcel 3. These features are associated with a swale that drains into the aforementioned drainage that runs immediately adjacent to this portion of the site. These features are severely disturbed by cattle. The seasonal wetland area associated with the abandoned aircraft runway is dominated by spikerush. Plant fragments identified in the wetland area near the drainage during the late fall surveys include Dallis grass (*Paspalum dilatatum*), crab grass

(*Cynodon dactylon*), loosestrife hyssop (*Lythrum hyssopifolium*), and Himalaya blackberry (*Rubus discolor*) (**Figures 6-1, 6-2 and 7**).

The "waters of the U.S." of the site occupy a total of 3.41 acres. **Table 1** below provides an acreage summary. The "Waters of the U.S." delineation map is folded in the rear pocket of the report and constitutes **Figure 7**. Completed standard USACE 1987 Manual data forms appear in the **Appendix**.

	Mapping Callout on	_
Feature	Figure 7	Acreage
Cattle Ponds	A, J, K, & L	1.46
Detention Basin	В	0.24
Intermittent Road Side Ditch	C & D	0.02
Ponds	F & N	0.22
Wetland Adjacent to Intermittent Stream	Е	0.02
Potential Vernal Pools	G & H	0.07
Intermittent and Ephemeral Drainages	M, O, P, Q, R, S, T	0.7
Seep	I	0.05
TO	ΓAL	2.78

TABLE 1.WATERS OF THE U. S. SUMMARY

#### 5.0 SUMMARY

Analytical Environmental Services has conducted a delineation of "waters of the U.S." occurring within the 230± acre Ione Casino study area. The study area is located near Plymouth, and is adjacent to State Route 49 in Amador County, California. The study area was systematically walked by AES biologists on November 19 and 25, 2003; and on January 16, 2004. All areas were viewed to the degree necessary to determine the presence or absence of jurisdictional "waters of the U.S." Waters of the U.S. have been mapped within the study area including intermittent and ephemeral streams, cattle ponds, vernal pools and a vernal swale. These "waters of the U.S." occupy a total of 2.78 acres.

#### 6.0 **REFERENCES**

- Analytical Environmental Services, 2004. Biological Resources Assessment Ione Casino Project Site. Unpublished January 2004 Report to the Bureau of Indian Affairs.
- Environmental Laboratory, 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. U.S. Army Engineer Waterways Experiment Station. Vicksburg, Mississippi.
- Hickman, James C., ed., 1993. *The Jepson Manual, Higher Plants of California*. University of California Press. Berkeley, California.
- Reed, P.B., Jr., 1988. National List of Plant Species That Occur in Wetlands: California (Region 0).
   Biological Report 88 (26.10). National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Florida.
- Sketchley, H. R., 1965. Soil Survey Amador Area, California. USDA, Soil Conservation Service (Natural Resources Conservation Service) and the California Agricultural Experiment Station.
- U.S. Geological Survey. 1962. "Amador City, California" 7.5-minute topographic quadrangle. U.S. Geological Survey, Denver, Colorado.

# **APPENDIX**

**DELINEATION DATA SHEETS** 

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening, John Howe, John M.	ller	State	ĊA
Do Normal Circumstances exist on the site?		Communi	ty ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	D Swale Sof Huy .49
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO		51

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator		
1 Quercus douglasii	T	NOL	9				
2 Toxico dendron diversilobum	5	NOL	10				
3			11				
4			12				
5			13				
6			14				
7			15				
8			16				
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $0/2 =$	0%			
Remarks							
Criteria not met							

#### HYDROLOGY

Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other	Gauge .	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits	
FIELD OBSERV	ATIONS	Drainage Patterns in Wetlands	
Depth of Surface Water	ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>	
Depth to Saturated Soil	N/A	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)	

No indicators

Map Unit Name (	Series and Phase)	: Exchegair # Ai	abara very tocky	Drainage Class: 040	essively diamed		
Taxonomy (Subg		/		Confirm Mapped Type?	YES NO		
		PROFIL	E DESCRIPTION				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
		HYDRIC	SOIL INDICATORS:				
Histosol			Concreti				
Histic Epi				ganic Content in Surface			
Sulfidic C				Streaking in Sandy Soil			
	isture Regime			n Local Hydric Soils List			
	r Conditions r Low-Chroma Colo		_	n National Hydric Soils I xplain in Remarks)	_ist		
Remarks:	r Low-Chroma Con			xpiain in Remarks)			
No pit excavated here.							

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES NO	
Remarks ND indicators;	no evidence	e of flow.

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES) NO	Community	y ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	D Stock pond S of Huy 49
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	SZ

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator		
1 Polygonum lapathifolium	H	OBL	9				
2			10				
3			11				
4			12				
5			13				
6			14				
7			15				
8			16				
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-)	0%			
Remarks							
Criteria met.							

HYDROLOGY
-----------

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches
No Recorded Data Available			Drift Lines Sediment Deposits
FIELD OBSERVATIONS			Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>18	(in)	Water-Stained Leaves
Depth to Saturated Soil	>18	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Criteria met.	Site is a,	main	tained stock watering pond.

OILS				loam; 3	14.51	perant slipe S2
Map Unit Name (S	eries and Phase):	Exchequer #	Auburn Very rock)			essively drained
Taxonomy (Subgro		ţ.	Field Observations			/
		PROF	ILE DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mot Abundance		Texture, Concretions, Structure, etc.
0-12	B	10YR 4/2	7.5YR 5/6	80%	dull	clay
12-18	C	2.5Y 7/6				inived up 7.57R SI
						Clay
		HYDRIC	SOIL INDICATORS:	<u> </u>		I
Reducing (	lor sture Regime		☐ Concret ☐ High Org ☐ Organic ☐ Listed o ☐ Listed o		Sandy Soil c Soils List ⁄dric Soils I	
water of	s within a foo the stock j	t of the surt	ace and has been	, subjected	to wea	thising by the

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? YES NO
Hydric Soils Present?	MES NO	
Remarks		

Remarks

Site is a man-made stock pond with wetland Characteristics -

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	Date 11/19/03
Applicant / Owner	County Amador
Investigator G.O. Graening, John Howe, John Miller	State CA
Investigator G.O. Gitmening , John Howe, John Miller Do Normal Circumstances exist on the site? (YES) NO	Community ID
Is the site significantly disturbed (Atypical Situation)? YES NO	) Transect ID Swale SE of Hwy 49
Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO	) Plot ID S3

#### VEGETATION

· .4

. : . . 1

, ,

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator		
1 Quercus douglasii	T	NOL	9				
2 Claytonia parviflora	H	FAC	10				
3 Avena fatua	H	NOL	11				
4			12				
5			13				
6			14				
7			15				
8			16				
Percent of Dominant Species that are OBL, FACW, or FAC (excluding FAC-) $1/3 = 33\%$							
Remarks				3			
Criteria not met.							

#### HYDROLOGY

Recorded Data (Describe in     Stream, Lake, or Tide     Aerial Photographs     Other     No Recorded Data Availab     FIELD OBSERV	Gauge		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A (in)		Water-Stained Leaves
Depth to Saturated Soil	N/A	(in)	General Test General Test Other (Explain in Remarks)

No indicators -

Map Unit Name (Series and Phase): Exchequer & Auburn very rocky Drainage Class: excessively drained								
Taxonomy (Subgr		Confirm Mapped Type?	1					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.			
HYDRIC SOIL INDICATORS:								
Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks)								
Remarks: No pr	4 was exce	auded here.						

Hydrophytic Vegetation Present?	YES	NO			0
Wetland Hydrology Present?	YES	NO	Is this Sampling Point Within a Wetland?	YES	(NO)
Hydric Soils Present?	YES	NO			$\bigcirc$
Remarks					and a second state of the

Remarks

No indicators. No evidence of flow.

DATA FORM - ROUTINE WETLAND DETERMINATION

### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project.		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES) NO	Communi	ty ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	D NW DryCr. Trib W bray
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	54

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Quereus Wislitenii	T	NOL	9		
2 Toxicodendron diversilibum	S	NOL	10		
3 Heteromeles arbut folia	S	NOL	11		
4 Ademstima fasciculatura	S	NOL.	12		
5 Artostaphyles Manzanita	S	NOL	13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $0/5 = 0$	1/8	
Remarks Criteria not n	eet.				

#### HYDROLOGY

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks On Slate fragments Drift Lines
No Recorded Data Available			Sediment Deposits
FIELD OBSERVATIONS			Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	(in)	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>
Depth to Saturated Soil	N/A	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Weak indicators o Downcutting appro	t intermittent		low at upper end of draininge.

SOILS			10	am, 31 to 51 pe	runt stopes. 54	
Map Unit Name (S	eries and Phase):	Exchequer ve		Drainage Class: On		
Taxonomy (Subgro		U		Confirm Mapped Type?	1	
		PROFIL	E DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
-						
		HYDRIC	SOIL INDICATORS:			
Histosol			Concreti	ons		
Histic Epip			High Org	ganic Content in Surface	e Layer in Sandy Soils	
Sulfidic Od				Streaking in Sandy Soil		
-	sture Regime		Listed on Local Hydric Soils List			
			Listed on National Hydric Soils List			
Gleyed or I	Low-Chroma Cold	ors	L Other (E	xplain in Remarks)		
Remarks:	in an					
No pin	t was exca	vated here.				

Hydrophytic Vegetation Present?	YES NO		
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland?	YES NO
Hydric Soils Present?	YES NO		$\smile$
Remarks			

Site is at or hear the upper end of an intermittent drainage in an ephemeral channel. Weak indicator + of flow.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	Date 11/19/03
Applicant / Owner	County Amader
Investigator G.D. Graching, John Howe, John Miller	State C.A
Do Normal Circumstances exist on the site?	Community ID
Is the site significantly disturbed (Atypical Situation)? YES NO	) Transect ID NW Dry Cr. Trib. WAW bi
Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO	Plot ID S5

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 QUERCUL Wishtenii	T	NOL	9		
2 Toxicodendron diversilobum	5	NOL	10		
3 Cynosurus Cchinatul	H	NOL	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $D/3 = 0$	1/8	
Remarks Critcria not n	met -				

#### HYDROLOGY

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
FIELD OBSERVATIONS			☑ Sediment Deposits □ Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	(in)	Water-Stained Leaves
Depth to Saturated Soil	H/A	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Beginnings of channi	el incision ;	Sort	ling of fines.

SOILS			Party Contractory and a contractory and the party of the second second second second second second second second	31 to 51 percent	slopes - SE	
Map Unit Name (S	eries and Phase)	: Exchequer very	rocky silt lum,	Drainage Class: Px(	essively drained	
Taxonomy (Subgro	pup)	0 /	Field Observations	Confirm Mapped Type?	YES NO	
		PROFIL	E DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
		HYDRIC S	SOIL INDICATORS:			
Histosol			Concreti	ons		
Histic Epip			High Org	anic Content in Surface	e Layer in Sandy Soils	
Sulfidic Od			└── Organic Streaking in Sandy Soils			
	ture Regime		Listed on Local Hydric Soils List			
Reducing C			Listed on National Hydric Soils List			
Gleyed or L	_ow-Chroma Cold	ors	U Other (E	xplain in Remarks)		
Remarks:						
No p	it was exci	availed here.				

Hydrophytic Vegetation Present?	YES (NO)			
Wetland Hydrology Present?	(YES NO	Is this Sampling Point Within a Wetland? YES (NO)		
Hydric Soils Present?	YES NO			
Remarks				
to ephemeral fi		of a drainage with intermittent		

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	Date 11/19/03
Applicant / Owner	County Amadoir
Investigator G.O. Ginening, John Howe, John Miller Do Normal Circumstances exist on the site? (YES) NO	State CA
Do Normal Circumstances exist on the site?	Community ID
Is the site significantly disturbed (Atypical Situation)? YES NO	Transect ID NW Dry CL-Trib. NW bran
Is the area a potential Problem Area? (If needed, explain on reverse) YES (NO	Plot ID SG

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species Stratum		Indicator
1 Quercus Wislizenii	T	NOL	9		
2 Toxicodendron diversilebun	S	NOL	10		
3 Cynosatus echinotus	H	NOL	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $O/3 = 0$	18	
Remarks Criteria hot	met.				

#### HYDROLOGY

<ul> <li>Recorded Data (Describe i</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul>		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
No Recorded Data Availat	le	Sediment Deposits
FIELD OBSERV	ATIONS	☐ Drainage Patterns in Wetlands
Depth of Surface Water	Ø (in	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit $N/A$ (in)		Water-Stained Leaves
Depth to Saturated Soil	N/A (in	FAC-Neutral Test ) Other (Explain in Remarks)
Incised Channel 3-	feet deep ; so	-ting of fine I

SOILS				31+151 percent	-slopes, 56	
Map Unit Name (S	eries and Phase):	Exchequer very	recky silt hom	Drainage Class: Cxc	essively drained	
Taxonomy (Subgro		0 7		Confirm Mapped Type?		
		PROFIL	E DESCRIPTION		·	
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
		HYDRIC S	SOIL INDICATORS:			
Histosol			Concreti			
Histic Epip				ganic Content in Surface		
Sulfidic Oc				Streaking in Sandy Soil		
	sture Regime		Listed on Local Hydric Soils List			
	Conditions		Listed on National Hydric Soils List			
-	Low-Chroma Colo	ors	└ Other (E	Explain in Remarks)		
Remarks:						
No 1	it was exca	voted hite -				
, , ,						

Hydrophytic Vegetation Present?	YES NO	~	
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? YES (NO)	
Hydric Soils Present?	YES NO		
Site is at - to ephemeral flow	the upper e	nd of a drainage with intermittent	

#### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	ana can jang mang ang ng kang sa kang s	Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES) NO	Commun	-
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect	10 NW Diry Ct. Trib. N branch
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	57

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Quercus Wislizenii	T	NOL-	9		
2 Heteromeles arbutifulia	S	NOL	10		
3 CYHOSUFUL RChinodul	H	NOL	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	are OBL, FAC	W, or FAC (	excluding FAC-) $0/3 = 0\%$		
Remarks Criteria hot h	net -				

#### HYDROLOGY

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks				
No Recorded Data Availab	le		Drift Lines			
FIELD OBSERVATIONS		Drainage Patterns in Wetlands				
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):			
Depth to Free Water in Pit $NA$ (in)		Water-Stained Leaves Local Soil Survey Data				
Depth to Saturated Soil	N/A	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)			
Beginnings of chann	Beginnings of channel formation; sorting of fines -					

SOILS				to SI percent sl	igii S7
Map Unit Name (S	Series and Phase):	Exchequer very	rocky sill ham,	Drainage Class: 1	cessively drained
Taxonomy (Subgroup)				Confirm Mapped Type?	YES NO
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
		HYDRIC	SOIL INDICATORS:		
Reducing		rs	Organic Listed or Listed or	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S
Remarks:		carated here.			

Hydrophytic Vegetation Present?	YES	NO			6
Wetland Hydrology Present?	YÉS	NO	Is this Sampling Point Within a Wetland?	YES	(NO)
Hydric Soils Present?	YES	NO			$\smile$
Remarks			L		

Site is at the head of an intermittent channel in the Zone of ephemeral flow.

DATA FORM - ROUTINE WETLAND DETERMINATION

### ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator		State	CA
Do Normal Circumstances exist on the site?	YES NO	Communi	ty ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	D Swale behind motel
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	58

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Hemizonia fasciculata	H	NOL	9		
2 Eremocarpul Setigerul	H	NOL	10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $0/2 = 0\%$		
Remarks Criteria hot,	met.				

#### HYDROLOGY

Recorded Data (Describe in Stream, Lake, or Tide G Aerial Photographs Other No Recorded Data Availab FIELD OBSERVA	e		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	à	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>18	(in)	Water-Stained Leaves
Depth to Saturated Soil	>18	(in)	Generation FAC-Neutral Test

Criteria not met.

Map Unit Name (S	Series and Phase):	Exchange and 1	Auburn loam, 3	Drainage Class: (7)	esterily drawn		
Taxonomy (Subgr		erency in anaci	Field Observations Confirm Mapped Type? YES NO				
PROF							
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsèll Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.		
0-14	A	2.5Y 4/3	10 YR 4/4	20% dull	silt ham		
14-16	A	2.57 4/3	NA	holie	Clay loom		
☐ Reducing ☐ Gleyed or	dor sture Regime		☐ Organic ☐ Listed or ☐ Listed or	ons ganic Content in Surface Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	5		
Remarks: CHIACH	ia het met	¢.					

Hydrophytic Vegetation Present?	YES NO			
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland?	YES	(NO)
Hydric Soils Present?	YES NO			0
Remarks				

Remarks

Criteria not met.

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?		Community	ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID	Swale behind partel at dite
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	59

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Paspalum dilatatum	H	FAC	9		
2 Lythrum hyssopitolium	Н	FACW	10		
3 Cynodon dactylon	H	FAC	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) 3/3 = 100%		
Remarks					
Critchia met					

#### HYDROLOGY

Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other	Gauge		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERV	ATIONS		Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	78	(in)	☐ Water-Stained Leaves ☐ Local Soil Survey Data
Depth to Saturated Soil	>8	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)

Slate bedrock near surface apparently causes seasonal ponding - Criteria mer.

Map Unit Name (	Series and Phase):	Exchequer and A	where loam, 340	Drainage Class: 27(	exilially drained	
Taxonomy (Subg		openet and the		eservations Confirm Mapped Type? YES NO		
		E DESCRIPTION				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.	
0-2	A	5Y 4/1	N/A	hone	clay loom	
2-8	B	2.5 Y 4/2	10 YR 4/4	60°/ , dull	Clay han	
		HYDRIC	SOIL INDICATORS:			
Histosol			Concret			
			personal second	ganic Content in Surface		
Sulfidic O			processing and the second	Streaking in Sandy Soils		
	sture Regime Conditions			n Local Hydric Soils List		
	Low-Chroma Colo	re		n National Hydric Soils L Explain in Remarks)	list	
Remarks:						
	rock at 8"	depth-				
	foria met.	Ŧ				

Hydrophytic Vegetation Present?	(YES) NO		
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? (	YES) NO
Hydric Soils Present?	(YES) NO		<u> </u>
Demarka	and the second se		

Remarks

Criteria met.

DATA FORM - ROUTINE WETLAND DETERMINATION

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator 6.0. Gracening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(TES) NO	Community	
Is the site significantly disturbed (Atypical Situation)?	YES 10	Transect ID	Ditch behind store
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	SID

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Rubus discolor	5	FACW ¥	9		
2 Paspalum dilutatum	H	FAC	10		
3 Cynodon dactylon	H	FAC	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	xcluding FAC-) $3/3 =$	100%	
Remarks			0/0		
Criteria met	*				
		A COLUMN A COLUMN			

#### HYDROLOGY

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERV	ATIONS		Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>8	(in)	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>
Depth to Saturated Soil	6	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)

Shallow slate bedrock creates a perched water table here. Criteria met

OILS				31 percent stopes -	Sid
		: Exchagner and A		Drainage Class: Crac	
Taxonomy (Subgr	oup)		Field Observations	Confirm Mapped Type?	YE'S NO
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-3	A	2.5 Y 4/1	10YR 4/4	30% dull	clay loam
3-8	B	2.5 4 4/1	10 YR 4/4	30%, dull	Focky clay
		HYDRIC	SOIL INDICATORS:		J
	dor sture Regime	ors	☐ Organic ☐ Listed or ☐ Listed or	ons ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	S
Remarks: Críte	ria met.	Slate bedroc	k encountered a	at 8" dep th.	

Hydrophytic Vegetation Present?	(YES) NO	
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? (YES) NO
Hydric Soils Present?	(YES) NO	
Remarks		I

Remarks

Criteria met.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/19/03	
Applicant / Owner		County Amador	
Investigator G.O. Gracning, John Howe, John Miller Do Normal Circumstances exist on the site? (YES)		State C.A	
Do Normal Circumstances exist on the site?	) NO	Community ID	
Is the site significantly disturbed (Atypical Situation)? YES	NO	Transect ID Vernal Swake Wot landing.	st
Is the area a potential Problem Area? (If needed, explain on reverse) YES	NO	Plot ID SII	511

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Eleocharis Macrostachya	Н	OBL	9		
2			10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) 1/1 = 100	76	
Remarks Criteria met	÷				

Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other	Gauge	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERV	ATIONS	Drainage Patterns in Wetlands
Depth of Surface Water	Ø (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>16 (in)	Water-Stained Leaves
Depth to Saturated Soil	>/6 (in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Vernal Swale has b Seasonal pondi	een blocked by ol ng - Crifersa	Id landing strip fill, which causes met.

viab Unit Name (S	eries and Phase)	: Exchequer and A	alun han 21	Drainage Class: 0N	constal, drawl
Faxonomy (Subgro		· Chiney Chir Unice Ti	/	S Confirm Mapped Type	<u>cessively drained</u> ? YES NO
		PROFIL		· · · · · · · · · · · · · · · · · · ·	. 120 110
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-2	A	2.54 4/2		10% faint	clay loan
2-16	B	2.54 4/3			clay loam
			SOIL INDICATORS:		
Reducing C Gleyed or L Remarks:	or ture Regime Conditions Low-Chroma Cold Low-Chroma Cold		□ Organic □ Listed o □ Listed o □ Other (E Stil Thelicat	ganic Content in Surfac Streaking in Sandy Soi n Local Hydric Soils Lis n National Hydric Soils Explain in Remarks)	ls t List
ETLAND DETE			1		
Hydrophytic Vegeta Vetland Hydrology Hydric Soils Preser	Present?	YES NO YES NO	Is this Sampling P	oint Within a Wetland?	YES NO
Remarks	s feature	is a mon-h	made, arti	ficial pond ,	with

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/19/03
Applicant / Owner		County Amador
Investigator G.O. Graening, John Howe, John	Miller	State CA
Do Normal Circumstances exist on the site?	(YES) NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID Vernal Swale at Send of land
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID S12 5

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Eryngium Castrense	H	FACW	9		
<sup>1</sup> Eryngium Castrense <sup>2</sup> Agrostis Stolonitera	H	FACW	10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	are OBL, FAC	W, or FAC (e	excluding FAC-) $2/2 = 1$	00%	
Remarks CHHCHÍA Met	,				

Recorded Data (Describe in Remarks)  Stream, Lake, or Tide Gauge  Aerial Photographs Other  No Recorded Data Available  FIELD OBSERVATIONS			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
	~		
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	> 14	(in)	Water-Stained Leaves
Depth to Saturated Soil	>14	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Vernal Swale has be	in blocked by	old	landing strip fill which causes
Seasonal ponding .	7		J /

OILS				31 percent slopes -	512
Map Unit Name (S	eries and Phase):	Exchequir and t	Auburn loan, 3te	Drainage Class: $e_{\chi_{C}}$	essionly drained
Taxonomy (Subgro	oup)	ŀ	Field Observations	Confirm Mapped Type?	1
		PROFIL	LE DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-14	A	2.545/3	10 YR 4/4	40%, dull	Clay luan
_		HYDRIC	SOIL INDICATORS:		
	or ture Regime	s	☐ Organic ☐ Listed o ☐ Listed o	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S
Remarks: Críter	ia hot me	4.			

Hydrophytic Vegetation Present?	(YES) NO	
Wetland Hydrology Present?	VES NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES (NO)	
Remarks Site is a u	lemal Swa	le at its head.

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/0	3
Applicant / Owner		County	Amador	
Investigator G.O. Graening , John Howe, John	Miller	State	CA	
Do Normal Circumstances exist on the site?	(YES) NO	Community	ID	
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID	Vernal Swele	E of landing s
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	TIPI-	527

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Eleocharis Macrostachya	Н	OBL	9		
2 Eryngium Castrense	H	FACW	10		
2 Eryngium Castrense 3 Eremocurpus setigerus	Н	NOL	11		
4			12		
5			13		
6			14		
7			15		
8			16	,	
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $2/3 = 6$	57%	
Remarks Criteria met	v				

<ul> <li>Recorded Data (Describe in I</li> <li>Stream, Lake, or Tide Ga</li> <li>Aerial Photographs</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches
L Other			Water Marks
No Recorded Data Available			Sediment Deposits
FIELD OBSERVAT	FIONS		Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>6	(in)	Water-Stained Leaves
Depth to Saturated Soil	>6	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Shallow bedrock cre Criteria met	ater Condit	ions t	that lead to the seasonal ponding of wate

SOILS				31 percent slopes	. TIPI
Map Unit Name (S	eries and Phase)	Exchequer and 1	Auburn loon, 3 to	Drainage Class: () (	essively drained
Taxonomy (Subgro		l		Confirm Mapped Type?	
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-6	A	2.57 5/3	2.5Y 5/6	10%, bright	clay loom
		HYDRIC	SOIL INDICATORS:		
Histosol			Concreti	ons	
Histic Epip	bedon		High Org	ganic Content in Surface	e Layer in Sandy Soils
Sulfidic O				Streaking in Sandy Soil	
	sture Regime			n Local Hydric Soils List	
	Conditions			n National Hydric Soils I	List
Gleyed or	Low-Chroma Col	ors	└┘ Other (E	xplain in Remarks)	
Remarks:					
Criter	ia hot me-	t.			
	1 1 1	en l'artes	11. and	5 in Land	
Jar	e bedrock	IS at or ne	ar the ground	over that a	

Hydrophytic Vegetation Present?	(YES) NO			$\sim$
Wetland Hydrology Present?	(YES) NO I	s this Sampling Point With	nin a Wetland?	YES (NO)
Hydric Soils Present?	YES (NO)			0
Remarks				
Site is	a vernal sw	ale.		

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	a particular ing high an ing tag an ing tag and the second of the second second second second second second sec	Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Giraening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	YES NO	Communi	ity ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect	ID Vernal swale Eotlanding
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	FIPZ 528

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Hemizonia fasciculata	H	NOL	9		
2 Vulpia myutos	H	FACU*	10		
3			11		
4			12		
5			13		
6			14		
7			15		
8		1	16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	xcluding FAC-) $D/2 = 0$	1/1	
Remarks Criteria not m	et .	2			

# HYDROLOGY

Recorded Data (Describe in Stream, Lake, or Tide of Aerial Photographs Other	Gauge	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits				
FIELD OBSERVATIONS			Drainage Patterns in Wetlands			
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):			
Depth to Free Water in Pit	78	(in)	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>			
Depth to Saturated Soil	78	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)			

No indicators apparent.

SOILS				-	te 31 pircent slipes	TIP2		
Map Unit Name (S	eries and Phase): (	Exchequer	. Chel A	uburn loan ,3	Drainage Class: @n.t	essively drained		
Taxonomy (Subgro		0		Field Observations Confirm Mapped Type? YES NO				
			PROFILE	E DESCRIPTION				
Depth (inches)	Horizon	Matrix C (Munsell I		Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
0-8	A	2.57 :	5/4	N/A	hone	elay loom		
		H	YDRIC S	OIL INDICATORS:		1		
	lor sture Regime	5		Organic  Listed of Listed of	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils I Explain in Remarks)	S		
Remarks: C + iHe	chia hot met	S	late	bedrock is	near the grow	nd surface.		
	COMINIATION							
WETLAND DET		YES	NO)			-		
Wetland Hydrolog		YES	60	Is this Sampling P	oint Within a Wetland?	YES NO		

Hydric Soils Present? Remarks

Criteria not met.

YES NO

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graening John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES) NO	Community	ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID	Vernal Swale Not landin
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	S13 57

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Etyngium Castrense	H	FACW	9		
2 Lythrum hyssopifolium	Н	FACW	10		
3 Hemizonia fasciculada	H	NOL	11		
4 Vulpia myuros	14	FACUX	12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	xcluding FAC-) $2/4 =$	50%	
Remarks					
Criteria 1	hadmat				
Criteria	TOT MET.	~			

# HYDROLOGY

Recorded Data (Describe in Remarks)     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits		
FIELD OBSERVATIONS			Drainage Patterns in Wetlands		
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):		
Depth to Free Water in Pit	>10	(in)	Water-Stained Leaves		
Depth to Saturated Soil	>10	(in)	<ul><li>FAC-Neutral Test</li><li>Other (Explain in Remarks)</li></ul>		

Criteria not met.

OILS		× 4 A	1 1 01	31 percent stoper	
		Exchequer and A			
Taxonomy (Subgro	oup)	<i>v</i>	Field Observations	Confirm Mapped Type?	YES NO
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretion Structure, etc.
0-8	A	2.5 Y 5/4	N/A	hone	Sandy learn
8-10	B	2.54 4/4	N/A	nune	Clay loam
		HYDRIC	SOIL INDICATORS:		
	dor sture Regime	ors	☐ Organic ☐ Listed o ☐ Listed o	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S
Remarks: Crite	ria hot m	e7 -			

Hydrophytic Vegetation Present? Wetland Hydrology Present?	YES (NO)	Is this Sampling Point Within a Wetland?	YES	(NO)
Hydric Soils Present?	YES (NO)			$\bigcirc$

Criteria not met -

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator 6.0. Graening, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES NO	Commur	hity ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect	10 Vernal poil E of Huy . 49
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	514

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Eleocharis Macro Hachna	H	OBL	9		
1 Eleocharis Macrostachyo 2 Etyngium Castiense	14	FACW	10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $2/2 = 100$	10	
Remarks Criteria met.					

Recorded Data (Describe in Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat FIELD OBSERV	Gauge		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	>8	(in)	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>
Depth to Saturated Soil	78	(in)	FAC-Neutral Test KOther (Explain in Remarks) algal model
Shallow bedrock.	facilitates t	hes	easonal ponding of water - Criteria. Me

Map Unit Name (S	eries and Phase): (	Exchediner and	Auburn loan, 3	Drainage Class: 0x0	essively drained
Taxonomy (Subgro		C C C C C C C C C C C C C C C C C C C		Confirm Mapped Type?	
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-8	A	2.5Y 4/3	N/A	hone	clay loam
	. 19				
		HYDRIC	SOIL INDICATORS:		
	lor sture Regime	5	☐ Organic ☐ Listed o ☐ Listed o	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S
Remarks:	lería not me	.+.	2 		
Sla	te bedrock	is hear sur	fac		

Hydrophytic Vegetation Present?	(TES) NO		
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? YES (NO)	
Hydric Soils Present?	YES NO		
Site is a	vernal D	100/-	
	J		

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/19/03
Applicant / Owner		County Amador
Investigator 6.0. Graching, John Howe, John M	iller	State CA
Do Normal Circumstances exist on the site?	Community ID	
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID North Stick pond
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID 515

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Eleocharis macrostachya	H	OBL	9		
2			10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $ /  = /60$	1%	
Remarks			······································		
Criteria met.					

# HYDROLOGY

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated # 100 ft from \$15 Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERVATIONS		Drainage Patterns in Wetlands
Depth of Surface Water	12. * (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit 712 (in)		Water-Stained Leaves
Depth to Saturated Soil $> 12$ (in)		☐ FAC-Neutral Test ☐ Other (Explain in Remarks)

Criteria met.

Map Unit Name (S	eries and Phase):	Exchequer and	Auburn loom, 3	Drainage Class: Crx (	essively drained
Faxonomy (Subgro		ţ.		Confirm Mapped Type?	
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-12	A	2.54 5/4	2.54 4/4	faint	clay loom
	L	HYDRIC	SOIL INDICATORS:		
	lor sture Regime	c	☐ Organic ☐ Listed o ☐ Listed o	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S
Remarks:	Heria hot m	**			

Hydrophytic Vegetation Present?	(YES) NO	
Wetland Hydrology Present?		Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES NO	
Remarks		1
This is a	stock po	nd with hydrophytic vegetation.

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/19/03
Applicant / Owner		County	Amador
Investigator G.O. Graching, John Howe, John	Miller	State	CA
Do Normal Circumstances exist on the site?	(YES) NO	Communit	-
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	D Seep at base of dam
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	516

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Elescharis Macrostochya.	H	OBL	9		
2 Juncus balticus	H	OBL	10		
3 Mentha pulegiam	Н	DBL_	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $3/3 = 100$	%	
Remarks Críteria Met.					

<ul> <li>Recorded Data (Describe i</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul>		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines
No Recorded Data Availat	ble	Sediment Deposits
FIELD OBSERVATIONS		Drainage Patterns in Wetlands
Depth of Surface Water	Ø (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit 712 (in)		Water-Stained Leaves
Depth to Saturated Soil	>12 (in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
OBL Speciel Sugge	st that hydrology	is present at other times in the year

SOILS				31 percent slopes	516
Map Unit Name (S	eries and Phase):	Exchequir and Al	uburn loam, 3+0	Drainage Class: 070	estively drained
Taxonomy (Subgro		V		Confirm Mapped Type?	YES NO
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.
0-12	A	2.54 5/4	NIA	hone	clay loam
		HYDRIC	SOIL INDICATORS:		
		ors	Organic Listed of Listed of	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils I Explain in Remarks)	S
Remarks:	ería not me	t. Slate 1	bedrock is t	ound 1-foot b	elow the
91	-ound level-				

Hydrophytic Vegetation Present?	(YES) NO	0
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES NO	
OBL Species Present, however, A recent Origin -	e indicate the lack for this s	that forcing hydrology is of hydric sails suggest seep.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date	11/25/03
Applicant / Owner		County	Amador
Investigator John Howe, John Miller		State	ĊA
Do Normal Circumstances exist on the site?	(YES) NO	Communit	y ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect II	DNWTHIG DryCr. NNEG
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	517

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Aesculus californica	S	NOL	9		
2 Claytonia parviflora	H	FAC	10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $1/2 = 50$	%	
Remarks Crítería hot	met.				

Recorded Data (Describe in     Stream, Lake, or Tide (     Aerial Photographs     Other     No Recorded Data Availab     FIELD OBSERV.	Gauge		WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	(in)	Water-Stained Leaves
Depth to Saturated Soil	N/A	(in)	General Test Other (Explain in Remarks)
Rounded edges of si	late tragments	in	streambed indicates flow -

Map Unit Name (S	Series and Phase):	Exchange very i	ocky sill ham,	Drainage Class: exe	U Contraction of the second se		
Taxonomy (Subgroup)			Field Observations Confirm Mapped Type? YES NO				
		PROFIL	E DESCRIPTION				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.		
		10					
Reducing	dor sture Regime		☐ Organic ☐ Listed or ☐ Listed or	ons ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	S		
Remarks:	lo pit was	excavaled he	ie .				

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? YES NO
Hydric Soils Present?	YES NO	
Remarks		
		ent channel.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/25/03
Applicant / Owner		County Amador
Investigator John Howe, John Miller		State CA
Do Normal Circumstances exist on the site?	(YES) NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID NW Trib Dry Cr. Main ster
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID 518

### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Aesculus californica	S	NOL	9		
2 Carduus pychocephalus	H	NOL	10		
3 Claytonia parvillora	H	FAC	11		
4 Bromus Carinatus	H	NOL	12		
5 Avena fatua	H	NOL	13		
6 Anthrising caucalis	H	NOL	14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $1/6 = 1$	7%	
Remarks					
Criteria	but met	l			
UFITCHA	rio i frici	5			

<ul> <li>☐ Recorded Data (Describe in</li> <li>☐ Stream, Lake, or Tide Ga</li> <li>☐ Aerial Photographs</li> <li>☐ Other</li> </ul>	auge	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERVA	TIONS	☐ Drainage Patterns in Wetlands
Depth of Surface Water	Ø (in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A (in)	Water-Stained Leaves
Depth to Saturated Soil	N/A (in)	FAC-Neutral Test Cother (Explain in Remarks)
Rounded edges of slate	- fragments in s	treambed indicates flow.

Map Unit Name (	Series and Phase):	Sycheaner Herei	Arky silt han	Lo SI percent slope Drainage Class: ex			
Map Unit Name (Series and Phase): Exchequer very Taxonomy (Subgroup)		Actiques bery	Field Observations Confirm Mapped Type? YES NO				
		PROFIL					
Depth Horizon (inches)		Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
	2						
		HYDRIC	SOIL INDICATORS:	1	L		
			Organic Listed of	ions ganic Content in Surface Streaking in Sandy Soil n Local Hydric Soils List n National Hydric Soils I	S		
_	r Low-Chroma Color	S		Explain in Remarks)			
Remarks:	o pit was	excavatel her	۹ ر				

Hydrophytic Vegetation Present?	YES NO		0
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland?	YES (NO)
Hydric Soils Present?	YES NO		<u> </u>
Remarks		4	
Site is on	indermidden	nt Chappils	

DATA FORM - ROUTINE WETLAND DETERMINATION

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#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Jone Casino Project		Date	11/25/03
Applicant / Owner		County	Amador
Investigator John Howe, John Mil	ler	State	CA
Do Normal Circumstances exist on the site?	YES NO	Community	y ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect IE	NWTHIBDAYCH. NESWA
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	519

### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator	
1 Avena fatua	H	NOL	9			
2 Taeniatherum Caput-medus	a H	NOL	10			
3 Vulpia myuroL	H	FACU*	11			
4			12			
5			13			
6			14			
7			15			
8			16			
Percent of Dominant Species that a	are OBL, FAC	CW, or FAC (e	excluding FAC-) $0/3 = 0$	18		
Remarks Criteria not met -						

Recorded Data (Describe in Reman     Stream, Lake, or Tide Gauge     Aerial Photographs     Other     No Recorded Data Available     FIELD OBSERVATIONS			WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	(in)	Water-Stained Leaves
Depth to Saturated Soil	N/A	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
No indicators appare	ent.		

soils leams, 31 to 51 percent slopes 510						
Map Unit Name (S	Series and Phase):	Exchequir and A	uburn very ricky	Drainage Class: 2xc	essively drained	
Taxonomy (Subgr		V		Confirm Mapped Type?		
		PROFIL	E DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
		HYDRIC	SOIL INDICATORS:	1	I	
Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy S         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks)						
Remarks: N d	pit was e	excavaled here	×			

Hydrophytic Vegetation Present?     YES     NO       Wetland Hydrology Present?     YES     NO		
		Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES (NO)	
Remarks		
No ind	icators app	arent -

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project Casino Lone Project/Site Date 25/03 Applicant / Owner County nador John John Miller Investigator State Howe (YES) NO Do Normal Circumstances exist on the site? Community ID Transect ID NW Trib Dry Cr. ENE Gram Is the site significantly disturbed (Atypical Situation)? YES NO, 520 Is the area a potential Problem Area? (If needed, explain on reverse) YES Plot ID (NO

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator	
1 Pinus sabiniana		NOL	9			
2 Carduns pychocephalus	H	NOL	10			
3 Taenietherum Caput-medusae	H	NOL	11			
4 CYNOSURUL ECHINATUL	H	NOL	12			
5 Vulpia myutos	H	FACU*	13			
6 / /			14			
7			15			
8			16			
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $D/5 = 0$	0%		
Remarks			0/			
Criteria not met.						

Recorded Data (Describe in Remarks)      Stream, Lake, or Tide Gauge     Aerial Photographs     Other      No Recorded Data Available      FIELD OBSERVATIONS			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	N/A	(in)	Water-Stained Leaves
Depth to Saturated Soil N/A (in)			☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Incision and sortin	g of fines	Sha	ggests ephemeral flow.

soils loams, 31 to SI pinet stops S20								
Map Unit Name (S	Map Unit Name (Series and Phase): Exchequer and Auburn Very rocky Drainage Class: excessionly drained							
Taxonomy (Subgroup)				Confirm Mapped Type?				
		PROFIL	E DESCRIPTION	10				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
	-							
HYDRIC SOIL INDICATORS:         Histosol       Concretions         Histic Epipedon       High Organic Content in Surface Layer in Sandy Soils         Sulfidic Odor       Organic Streaking in Sandy Soils         Aquic Moisture Regime       Listed on Local Hydric Soils List         Reducing Conditions       Listed on National Hydric Soils List         Gleyed or Low-Chroma Colors       Other (Explain in Remarks)								
Remarks: No	pit was e	x caualed here	*					

Hydrophytic Vegetation Present?	YES NO	0
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES NO	
Remarks Site is at OF hear the Zone o-	the upper f ephemera	end of an intermittent drainage at 1 flow.

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/25/03
Applicant / Owner		County Amador
Investigator John Howe, John Miller		State CA
Do Normal Circumstances exist on the site?	ES NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID NW Dry Cr. Trik NE br
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID SZ1

## VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Aesculus californica	S	NOL	9		
2 Toxico dendron diversilibum	S	NOL.	10		
3 Cynosurus echinatus	Н	NOL	11		
4 Trifolium angustifolium	H	NOL	12		
5 Avena Fatur	1-1	NOL	13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $0/5 = 0$	>%	
Remarks Chitetia n	of met.				
Of Hand In					

Recorded Data (Describe i Stream, Lake, or Tide Aerial Photographs Other No Recorded Data Availat FIELD OBSERV	Gauge ble		WETLAND HYDROLOGY INDICATORS Primary Indicators:  Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits Drainage Patterns in Wetlands
Depth of Surface Water	ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	NA	(in)	Water-Stained Leaves
Depth to Saturated Soil $N/A$ (in)			FAC-Neutral Test Other (Explain in Remarks)
Rounded fragments	of slate in H	hes	streambed indicates flow.

Map Unit Name (S	Series and Phase):	Fychanna ingine in		Drainage Class: Cxcd	CLASSING STREET, STREE
Map Unit Name (Series and Phase): Exchagure very neky silling Taxonomy (Subgroup) Field Observ			//	Confirm Mapped Type?	PYES NO
		PROFIL			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
		HYDRIC	SOIL INDICATORS:		
		ors	Organic Listed or Listed or	ons ganic Content in Surface Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	S
Remarks: N d	pit was t	excounted here.	94		

Hydrophytic Vegetation Present?	YES (NO)	
Wetland Hydrology Present?	(TES NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES (NO)	
Site is an	internitten	tly-flowing channel.

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project	1997 tal 1996 Million Anna (Albana and Alba) ta anna	Date 11/25/03
Applicant / Owner		County Amador
Investigator John Howe, John Miller		State CA
Do Normal Circumstances exist on the site?	(YES) NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID Central Stock pond
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID SZZ

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Juncus balficus	H	OBL.	9		
2			10		
3			11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	are OBL, FAC	W, or FAC (e	excluding FAC-)	100%	L
Remarks Criteria n	ne-t.		1/ 1	1 10	

<ul> <li>Recorded Data (Describe)</li> <li>Stream, Lake, or Tide</li> <li>Aerial Photographs</li> <li>Other</li> </ul>	1.4		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks
FIELD OBSERVATIONS			<ul> <li>Drift Lines</li> <li>Sediment Deposits</li> <li>Drainage Patterns in Wetlands</li> </ul>
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	74	(in)	Water-Stained Leaves
Depth to Saturated Soil	74	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)
Stock pond excau	ated to slat	te bea	drock which traps water; tank is a

Map Unit Name (S	Series and Phase): (	Exchance and Au	Lum leams, 3to	Drainage Class: 040	essively drained
Taxonomy (Subgroup)				Confirm Mapped Type?	/
		PROFIL	E DESCRIPTION		
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-4	B	5Y4/2_	NA	nohe	clay loam
		HYDRIC S	SOIL INDICATORS:		
		S	Organic Listed or Listed or	ons ganic Content in Surface Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L xplain in Remarks)	S
Remarks: Sla	ate bedrock	near or at	surface.		
Cr	Heria hot y	met.			

Hydrophytic Vegetation Present?	(YES) NO	~
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? YES (NO)
Hydric Soils Present?	YES NO	
Site is a	2 Man-m	ade stock watering pond.

DATA FORM - ROUTINE WETLAND DETERMINATION

#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Piroject		Date	11/25/03
Applicant / Owner		County	Amador
Investigator John Howe, John Miller		State	CA
Do Normal Circumstances exist on the site?	YES NO	Communit	*
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect I	Ditch at detention poind
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID	523

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Populus fremontii	S	FACW	9		
2 Rubus discolor	5	FACW*	10		
3 Typha latifolia	H	OBL	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	are OBL, FAC	W, or FAC (e	excluding FAC-) $3/3 = 1$	00%	
Remarks Criteria n	net.				

#### HYDROLOGY

<ul> <li>Recorded Data (Describe in</li> <li>Stream, Lake, or Tide (</li> <li>Aerial Photographs</li> <li>Other</li> </ul>	Sauge	WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERV	ATIONS	, Drainage Patterns in Wetlands
Depth of Surface Water (in)		) Secondary Indicators (2 or more Required):
Depth to Free Water in Pit (in)		Local Soil Survey Data
Depth to Saturated Soil	2 (1	n) FAC-Neutral Test Other (Explain in Remarks)
0.1		,

Criteria met -

SOILS			31	perant slopes.	S23		
Map Unit Name (S	Series and Phase): (	Excheginer and Au	Lurn lorms, 3to	Drainage Class: 0x (	essively drained		
Taxonomy (Subgroup)			Field Observations Confirm Mapped Type? YES NO				
		PROFIL	E DESCRIPTION				
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.		
0-16	A	5Y 4/1	N/A	hobe	Silly send with		
					foreign plastic		
					debris		
		•					
		HYDRIC	SOIL INDICATORS:				
Histosol			Concreti	ons			
Histic Epip	edon		High Org	anic Content in Surface	Layer in Sandy Soils		
Sulfidic Oc	lor		protocol (	Streaking in Sandy Soils			
*	sture Regime		Listed on Local Hydric Soils List				
Reducing			Listed or	n National Hydric Soils L	.ist		
	Low-Chroma Color	S	U Other (E	xplain in Remarks)			
Remarks: CHH	ería met.						

Hydrophytic Vegetation Present?	(YES) NO	
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? (YES) NO
Hydric Soils Present?	(YES) NO	
Remarks		
	Criteria	a hart
	$(\mathcal{F})$ $(\mathcal{F})$	~ //// ·

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 11/25/03
Applicant / Owner		County Amador
Investigator John Howe, John Miller		State CA
Do Normal Circumstances exist on the site?	(YES) NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES NO	Transect ID Ditch in front of mode
Is the area a potential Problem Area? (If needed, explain on reverse)	YES NO	Plot ID 524

### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Salix lasiolepis	S	FACW	9		
2 Typha latifolia	H	OBL	10		
3 Epilibium ciliatum	H	FACW	11		
4 Cyperus eragnistis	H	FACW	12		
5 Cynodon dactulon	1-1	FAC	13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) 5/5 =/0	0%	
Remarks Críteria i	met.				

# HYDROLOGY

<ul> <li>Recorded Data (Describe in Re</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul>	je		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits
FIELD OBSERVATIO	NS		Drainage Patterns in Wetlands
Depth of Surface Water	ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	4	(in)	Water-Stained Leaves
Depth to Saturated Soil	Ø	(in)	☐ FAC-Neutral Test ☐ Other (Explain in Remarks)

Criteria met.

1ap Unit Name (	Series and Phase	: Exchequer = Aut	un / 10me, 3-3.	Drainage Class: Pxc	curively drained
axonomy (Subg		1000		Confirm Mapped Type?	the second se
		PROFIL	E DESCRIPTION		
Depth (inches)			Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions Structure, etc.
0-8	A	2.54 4/3	N/A	hone.	silty sand
		mixed with			/
		5Y 4/1			sildy clay
		HYDRIC	SOIL INDICATORS:		1
Histosol			Concret	ions	
Histic Epi				ganic Content in Surface	
Sulfidic O				Streaking in Sandy Soil	
	isture Regime			n Local Hydric Soils List	
	Conditions Low-Chroma Col			n National Hydric Soils L	List
	Low-Chroma Cor	015		Explain in Remarks)	
lemarks:	, / ,	, 1			
DIAT	te bedroci	k near base	of ditch.		

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?	YES NO	Is this Sampling Point Within a Wetland? (YES) NO
Hydric Soils Present?	(YES) NO	
Remarks		1
0.1	eria met.	
CLIT	etia met.	

#### DAIAFURM

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#### ROUTINE WETLAND DETERMINATION (1987 COE Wetlands Delineation Manual)

Project/Site Ione Casine Project	a a a a a a a a a a a a a a a a a a a		Date 1/16/04
Applicant / Owner			County Amador
Investigator Paul García, John Miller			State CA
Do Normal Circumstances exist on the site?	(YES)	NO	Community ID
Is the site significantly disturbed (Atypical Situation)?	YES		Transect ID Stock paral head Dij Ci-T
Is the area a potential Problem Area? (If needed, explain on reverse)	YES (	NO	Plot ID S25

#### VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Typha latitulia	H	OBL	9		
2 Junear ballieus	H	OBL	10		
3 Cyperus chagrostis	H	FACW	11		
4			12		
5			13		
6			14		
7			15		
8			16		
Percent of Dominant Species that a	are OBL, FAC	W, or FAC (e	excluding FAC-) $3/3 = 100$	%	
Remarks					
Criteria M	net.				

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> <li>No Recorded Data Available</li> </ul>		WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits	
FIELD OBSERVATIONS		Drainage Patterns in Wetlands	
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required):
Depth to Free Water in Pit	Ø	(in)	<ul> <li>Water-Stained Leaves</li> <li>Local Soil Survey Data</li> </ul>
Depth to Saturated Soil	Ø	(in)	<ul> <li>FAC-Neutral Test</li> <li>Other (Explain in Remarks)</li> </ul>

Criteria met.

SOILS		C I	CALL AND A REAL PROPERTY OF CONTRACT STATEMENT AND A REAL PROPERTY OF CONTRACT OF CONTRACT.	31 percent slopes				
Map Unit Name (S	series and Phase):	EX Chequer an	nd Auburn Ioam.	Drainage Class: Cx C	essively obtained			
Taxonomy (Subgro	oup)	U	1	Confirm Mapped Type?	YES NO			
		PROFIL	FILE DESCRIPTION					
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.			
0-6	B	2.544/1	N/A	hone	rocky clay			
6-8	C	546/2	NIA	Moure	Focky clay			
		HYDRIC S	SOIL INDICATORS:					
		S	Organic Listed of Listed of	ions ganic Content in Surface Streaking in Sandy Soils n Local Hydric Soils List n National Hydric Soils L Explain in Remarks)	S			
	ate bedrock Hiteria met	hear or at	surtau					

Hydrophytic Vegetation Present?	(YES) NO					
Wetland Hydrology Present?	(YES) NO	Is this Sampling Point Within a Wetland? (YES) NO				
Hydric Soils Present?	(YES) NO					
Remarks		· ·				
Criteria met pond.	. Sit	le is a man-made stock watering				
,						
1						

DATA FORM - ROUTINE WETLAND DETERMINATION

# ROUTINE WETLAND DETERMINATION

(1987 COE Wetlands Delineation Manual)

Project/Site Ione Casino Project		Date 1/16/04
Applicant / Owner		County Amador
Investigator Paul Garcia, John Miller		State CA
Do Normal Circumstances exist on the site?	) NO	Community ID
Is the site significantly disturbed (Atypical Situation)? YES	NO	Transect ID Hind of Dry Cherk Trib.
Is the area a potential Problem Area? (If needed, explain on reverse) YES		Plot ID SZ6

# VEGETATION

Dominant Plant Species	Stratum	Indicator	Dominant Plant Species	Stratum	Indicator
1 Claytonia pertiliata	H	FAC	9		
2 Cynasural echinadus	H	NOL	10		
3 Stillaria media	Н	FACU	11		
4			12		
5			13		
6			14		-
7			15		
8			16		
Percent of Dominant Species that a	re OBL, FAC	W, or FAC (e	excluding FAC-) $1/3 = 3$	3 %	
Remarks					
Criteria ho	t met .				

<ul> <li>Recorded Data (Describe in Remarks)</li> <li>Stream, Lake, or Tide Gauge</li> <li>Aerial Photographs</li> <li>Other</li> </ul>			WETLAND HYDROLOGY INDICATORS Primary Indicators: Inundated Saturated in Upper 12 Inches Water Marks Drift Lines Sediment Deposits	
FIELD OBSERVATIONS			Drainage Patterns in Wetlands	
Depth of Surface Water	Ø	(in)	Secondary Indicators (2 or more Required): Oxidized Root Channels in Upper 12 Inches Water-Stained Leaves Local Soil Survey Data FAC-Neutral Test Other (Explain in Remarks)	
Depth to Free Water in Pit	ø	(in)		
Depth to Saturated Soil	ø	(in)		

Criteria met.

SOILS			3 70 31	perant sliper -	52	
Map Unit Name (S	eries and Phase):	Exchequer and	Auburn learne,	Drainage Class: Pro	essively durined	
Taxonomy (Subgroup)			Field Observations Confirm Mapped Type? YES NO			
		PROFIL	E DESCRIPTION			
Depth (inches)	Horizon	Matrix Color (Munsell Moist)	Mottle Colors (Munsell Moist)	Mottle Abundance/Contrast	Texture, Concretions, Structure, etc.	
0-16	A	2.5Y 3/2	N/A	hone	rocky clay	
		HYDRIC :	SOIL INDICATORS:			
<ul> <li>Histosol</li> <li>Histic Epipedon</li> <li>Sulfidic Odor</li> <li>Aquic Moisture Regime</li> <li>Reducing Conditions</li> </ul>			<ul> <li>Concretions</li> <li>High Organic Content in Surface Layer in Sandy Soils</li> <li>Organic Streaking in Sandy Soils</li> <li>Listed on Local Hydric Soils List</li> <li>Listed on National Hydric Soils List</li> </ul>			
Gleyed or Low-Chroma Colors			Other (Explain in Remarks)			
Remarks:	titersa not	met-			-	
WETLAND DET	The second s	YES KO)				

Hydrophytic Vegetation Present?	YES NO	
Wetland Hydrology Present?		Is this Sampling Point Within a Wetland? YES NO
Hydric Soils Present?	YES NO	
Remarks		
Site is Wa-	lers of the	U.S. at the headwaters.

DATA FORM - ROUTINE WETLAND DETERMINATION