

TABLE 1
LISTED, CANDIDATE, AND OTHER SPECIES COVERED BY THE METRO AIR
PARK PERMITS *

HABITAT & SPECIES	FEDERAL STATUS	STATE STATUS	HABITAT NOTES
<i>WETLAND ASSOCIATED SPECIES</i>			
Aleutian Canada goose <i>Branta canadensis leucopareia</i>	Delisted 2001		Grazes in marshes and stubble fields, roosts on the water
Swainson's hawk <i>Buteo swainsoni</i>		T	Breeds in riparian forest; known nesting sites in trees along Sacramento River in Natomas Basin
giant garter snake <i>Thamnophis gigas</i>	T	T	Forages in low gradient open waterways and flooded rice fields, hibernates in canal berms and other uplands; several known occurrences in Natomas Basin
white-faced ibis <i>Plegadis chihi</i>	SC	SSC	Forages in flooded rice fields
bank swallow <i>Riparia riparia</i>		T	Nests in riverbanks, forages for insects over open water, croplands, and grasslands
peregrine falcon <i>Falco peregrinus anatum</i>	Delisted 1999	E, FP	Preys on birds, including waterfowl in and around wetlands
greater sandhill crane <i>Grus canadensis tubida</i>		T, FP	Forages in moist croplands with stubble and emergent wetlands
tricolored blackbird <i>Agelaius tricolor</i>	SC	SSC	Nests in marshes with bulrush, blackberry or cattails; three known occurrences in Natomas Basin
northwestern pond turtle <i>Clemmys marmorata marmorata</i>	SC	SSC	Lives in permanent bodies of water; requires floating vegetation, logs, rocks or banks for basking

HABITAT & SPECIES	FEDERAL STATUS	STATE STATUS	HABITAT NOTES
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	T		Lives and reproduces on elderberry shrubs found along rivers and canals
Delta tulle pea <i>Lathyrus jepsonii ssp.jepsonii</i>	SC		Perennial twining vine occurs in both riparian and marsh habitats
Sanford's arrowhead <i>Sagittaria sanfordii</i>	SC		Tuberose perennial likely in drainage or irrigation ditches
UPLAND ASSOCIATED SPECIES			
Swainson's hawk <i>Buteo swainsoni</i>		T	Forages for small mammals in grasslands and croplands
Tricolor blackbird <i>Agelaius tricolor</i>	SC	SSC	Forages on the ground in grasslands and croplands; three known occurrences in Basin
Loggerhead shrike <i>Lanius ludovicianus</i>	SC	SSC	Prefers open habitats with scattered shrubs, trees, fences, and posts. Will use cropland.
Burrowing owl <i>Athene cunicularia</i>		SSC	Prefers open, dry grassland and desert habitats

*Note that some species occur in more than one habitat category and thus are listed twice. A total of 14 species are included in Table 1 and are covered by the permits.

Key to Abbreviations

Federal

- E = Listed as endangered
- T = Listed as threatened
- C = Candidate for federal listing, data sufficient
- SC = Species of Concern -- informal category, formerly called candidate 2 species (data for listing insufficient)

State

- E = Listed as Endangered
- T = Listed as Threatened
- FP = Fully Protected
- R = Listed as Rare
- SSC = Species of Special Concern

Natomas Interceptor. Approximately 190 acres will be permanently disturbed to install the Tier One infrastructure improvements. Specific improvements and affected areas are contained in Table 2.

TABLE 2
TIER ONE INITIAL ON AND OFF-SITE INFRASTRUCTURE IMPROVEMENTS

INITIAL ON-SITE INFRASTRUCTURE IMPROVEMENTS	AREA (acres)
Elkhorn Boulevard	13.4
Metro Air Parkway	33.3
Freeway Embankment	28.3
Earthwork Balance & Offsite NCMWC Facilities	10.9
Road "B" /Meister Way Outfall	5.8
Road "G" Drain Line	3.8
Detention/Water Quality Facilities	47.7
Sewer Lift Station	0.3
Pump Station - 1 Sites	0.5
Well Sites - 2 Sites	0.4
Storage Reservoir and Booster Pump	3.5
Water Treatment Plant Site	1.5
Off-Site Sewer Line Extension	41.0
TOTAL	190.4

As Figure 3 indicates, development of the initial on-site infrastructure improvements would not affect current farming practices as they primarily involve roadway and drainage improvements. The drainage improvements would not affect water deliveries to agricultural lands. As many as 650 additional acres would be temporarily disturbed by initial project grading, but will be returned to their original agricultural land use upon completion of initial grading work. Most of the 650 acres to be temporarily disturbed are currently fallow.

would be developed into a four-lane roadway from Lone Tree to State Route 99. The disturbance associated with the new roadway would be included in the land area needed to install the sewer extension.

Improvements to Del Paso Road from Power Line Road to Sacramento City Limits. Improvements include reconstructing existing road to two-lane arterial standards and installing signals at South Bayou Road. The existing 26-foot roadway would be widened to 42 feet and would include a wider traffic lane as well as pull-off shoulders.

Improvements to Power Line Road from I-5 to Del Paso Road. Improvements include overlaying existing pavement, widening each side to two-lane arterial standards and installing signals at Power Line Road. The existing 26-foot roadway would be widened to 42 feet and would include a wider traffic lane as well as pull-off shoulders.

In total, about 123 acres of land would be affected by the off-site infrastructure improvements. MAP POA will oversee construction of the off-site infrastructure improvements and payment of mitigation fees which will be funded through the same Mello Roos bond (or a similar bonding mechanism) that funds the initial infrastructure improvements (see discussion of bonding mechanism, section III.B Funding). The off-site sewer installation will coincide with the on-site Tier One improvements adding about 41 acres to the total area disturbed during Tier One construction.

**TABLE 3
OFF-SITE INFRASTRUCTURE IMPROVEMENTS**

PROJECT	IMPACT	ACREAGE
RD-1000 Off-Site Drainage Improvements		
Del Paso Culvert	200'x200' work area	1.0
Power Line Road Culvert	200'x200' work area	1.0
Canal Reach 4&5 Culverts	100' wide x 400' long construction envelope	1.0
Off-Site Reach No. 8 Improvements	125' wide x 5,600' long construction envelope	16.1
Airport/NCMWC Irrigation Pump	50' wide x 4,000' long construction envelope	4.6
Sub-Total		23.7
Off-Site Sewer Improvements		

Meister Way/99/I-5 Trunk Line or Elkhorn Road/99/I-5 Trunk Line	100' wide x 17,700' long construction envelope (worst case)	40.7 (approx. 14 acres of the total is within the City limits)
Off-Site Roadway Improvements		
Elverta Road Improvements Lone Tree to 99		9.7
Elkhorn Blvd. Improvements Lone Tree to 99		14.7
Meister Way Extension to 99	disturbance area included in sewer line extension area. No additional disturbance.	0.0
Elkhorn Blvd. Extension to Airport		14.0
Del Paso Road from Power Line Road to City Limits, Improvements		2.0
Power Line Road from I-5 to Del Paso Road, Improvements		2.0
South Bayou Road Improvements		16.0
Sub-total		58.4
GRAND TOTAL		122.8

3. Site-specific Surveys and Canal Revegetation

Site-specific surveys including biological surveys have not been completed for MAP’s off-site infrastructure improvement projects. The estimated total number of acres proposed to be affected by the off-site infrastructure projects is 123 acres and covered species are the only species anticipated to be affected by the infrastructure projects. MAPPOA will conduct the wildlife agency approved pre-project surveys including, but not limited to, biological surveys and provide the data and results to the USFWS and the CDFG to review. If during the pre-construction surveys it is determined that the total acres of land, type of habitat, or effects on covered species are greater than permitted, or uncovered listed species will be affected, then the permit must be amended, and MAPPOA will be responsible for payment of any additional

prior to habitat disturbance activities such as grading or grubbing for development purposes.

The approved version of the Master Plan shows that the costs included in the initial Mello-Roos bonds for public improvements totals \$67.66 Million. An initial payment of approximately \$750,000 will be paid for the impacts of disturbance caused by installation of the 150 acres of on-site initial infrastructure improvements and 41 acres of off-site sewer improvements which, under the 0.5:1 mitigation ratio, will provide for the acquisition of 95 acres of habitat reserve. The Mello Roos bonds will also pay for the 200-acre Swainson’s Hawk nest tree reserve (see Table 5 for breakdown of the fee for Swainson’s hawk nest tree mitigation. The NBC has estimated the cost of nest tree mitigation lands to be \$1,900,000 if the NBC purchases the mitigation lands and if no revenue from rice lands or hunting is assumed. All fees generated from the Mello Roos or similar bonding mechanism must be collected prior to disturbance of the 191 acres. Payment for subsequent tier two off-site drainage and roadway improvements will be funded by subsequent Mello Roos bond proceeds that have been preauthorized. Mitigation funds covering those offsite improvements will be paid to the NBC prior to habitat disturbance activities on the off-site lands such as grading or grubbing.

2. 0.5:1 Mitigation Fee

Under the MAP HCP, individual landowners/developers will pay a one-time mitigation fee on the gross acreage of the parcel(s) which will be converted to urban development. The mitigation fee will be the same as that approved currently and in the future by the City of Sacramento under the Regional Plan. City fees were increased to \$5,993 on June 12, 2001 by Sacramento City Council Resolution 2001-391. The mitigation fee is broken down into five components which are listed in Table 4.

The initial Regional Plan mitigation fee was arrived at following a detailed analysis of the fees necessary to adequately fund all the functions of the NB HCP. The economic analysis was prepared by Economic and Planning Systems (EPS) in conjunction with the Sacramento Area Flood Control Agency (SAFCA). The full analysis, including all of the assumptions and supporting basis, is presented in EPS, 1995 (see Appendix B of NBHCP). The EPS/SAFCA estimate of the fee per acre in 1995 dollars necessary to support the functions of the NBHCP was \$2,240 per developed acre of land. On September 2, 1997, by Resolution No. 97-508, the Sacramento City Council increased the NBHCP mitigation fee, in part, to reflect less reliance on hunting revenues to support NBHCP funding needs. The fee was increased again by the Sacramento City Council in August 1999, September 2000, and June 2001. The 2001 fee increase breakdown is shown below in Table 4.

**TABLE 4
MITIGATION FEE COMPONENTS PER ACRE DEVELOPED ***

Land Acquisition	\$3,000.00
Restoration/Enhancement/Monitoring	\$ 368.00
Administration O & M	\$1,555.00
<u>O % M Endowment Fund</u>	<u>\$ 950.00</u>
Subtotal Mitigation Fee	\$5,873.00
Fee Collection Administration (2% of fee)	\$ 120.00
Total Fee Per Gross Developed Acre (2001\$)	\$5,993.00

*For funds available to support management of each acre of mitigation land, multiply these figures by two.

The "MAP Baseline Map" is contained in Exhibit "A" to the Implementation Agreement and is submitted to the USFWS and CDFG with the MAP HCP as Figure 7. This map and Figure 4 (Off-Site Improvements) show the covered lands that are subject to the mitigation fee.

The Metro Air Park project could pay mitigation fees on as many as 1,892 acres of the project site (the entire site) and 123 acres of off-site infrastructure which are proposed for development. Using the \$5,993 per acre fee established in the NBHCP, and multiplying it times 2011 acres, the project could ultimately generate as much as \$12,000,000 in mitigation fees.

Payment of mitigation fees will be phased over the 30-50 year build-out period. After the initial infrastructure improvements are completed, individual landowners will pay mitigation fees on those phases of the project that they develop. To encourage the retention of habitat values on existing agricultural lands until development occurs, any existing agricultural land in the MAP area will be subject to the payment of development mitigation fees if the landowner voluntarily elects to take land out of agricultural production for a period of more than one year prior to the receipt of development permits on the land to which they apply, or if lands are left fallow (not seeded) for over a period of three years. Mitigation fees will also be collected for any lands temporarily disturbed by Tier One Urban Development which are not returned to agricultural production within twelve consecutive months following completion of the particular Tier One Urban Development project, including the off-site sewer line extension. In each case the lands will be considered to be converted to Urban Development.

Landowner fee payments must be paid to the County before the landowner/developer receives the final grading permit for the phase of the project they are developing. In addition, landowners must provide written documentation to the County that they have carried out pre-construction surveys and implemented Resource Agency approved take minimization measures on the development site prior to obtaining final grading permits. Copies of the fee payment and take minimization certificates will be submitted to the NBC, USFWS and CDFG.

Optionally, with written approval from the MAP POA, NBC, USFWS, and CDFG individual landowners may donate land to the NBC in lieu of payment of some or all of the acquisition component of the mitigation fee. The landowner will be required to pay the most current administrative, endowment, and habitat management components of the mitigation fee on donated land. In such cases, the NBC, USFWS, and CDFG will determine which lands are acceptable, considering location, proximity to urban uses and roads, and current condition. Open space left within developed areas will require mitigation. Areas determined to be suitable for mitigation must be transferred to the NBC or another suitable entity approved by the USFWS and CDFG or be encumbered by a conservation easement approved by the USFWS and CDFG.

Refer to Section 4.5 of the MAP IA for more details on the mitigation fees.

Refer to Appendix D for more details including assumption tables.

The NBC used the cash flow analysis to determine the mitigation fee payment for the Swainson's hawk 200-acre nest tree mitigation lands. The model used the same four major funding assumptions mentioned above. The assumptions used in the analysis were: (1) mitigation must take place within the Basin; (2) the rules governing mitigation land available for acquisition are consistent with those in the current HCP; (3) no rice production could take place; (4) light grazing would be allowed; and (5) the land would be restored to native grasslands. The NBC estimated the cost of nest tree mitigation lands to be \$1,900,000 if the NBC purchased the mitigation lands and if no revenue from rice lands or hunting is assumed. The fee increase breakdown is shown below in Table 5.

**TABLE 5
MITIGATION FEE COMPONENTS PER ACRE DEVELOPED FOR SWAINSON'S
HAWK NEST TREE MITIGATION**

Land Acquisition	\$5,000
Restoration/Enhancement/Monitoring	\$ 996
Administration O & M	\$2,550
<u>O % M Endowment Fund</u>	<u>\$ 800</u>
Subtotal Mitigation Fee	\$9,346
Fee Collection Administration (2% of fee)	\$ 188
Total Estimated Fee Per Gross Developed Acre (2000\$)	\$9,534

The Endowment Fund fee is raised to \$800.00 per acre (compared to the normal \$190.00) on the 200 acres of MAP POA supplemental Swainson's hawk mitigation land. Because the Plan does not assume farming revenue for this mitigation land, there is a shortfall in funding in the Administration Fund at the end of the 50-year permitting phase of the Plan. Therefore, the Endowment Fund must be drawn upon to make up for any shortfall in revenue. In order to assure sufficient interest earnings in year 50, the Plan requires an initial principal balance of \$160,000.00 (or \$800.00 per acre over 200 acres). In essence, the additional money assures that in the later years of the Plan's implementation, there are enough funds to sustain the operations and maintenance of acquired mitigation lands.

7. Provisions to Assure Plan is Adequately Funded

The MAP HCP and Implementation Agreement (IA) incorporate several mechanisms to ensure the plan is fully funded. Section 4.5.7(1) of the IA provides that the NBC shall either on its own or at the request of either USFWS or CDFG, adjust the Base Mitigation fee to take into account the increased costs of land acquisition and NBC operations, including ongoing management and monitoring costs, or as necessary to ensure that the mitigation ratio of .5 acres of mitigation land to 1 acre of development is met. Section 4.5.7(2) of the IA requires the automatic adjustment of Base Mitigation Fees whenever the Base Mitigation Fees under the NBHCP are adjusted to ensure the MAP fee is at least equal to the current fees assessed under the NBHCP. Section 4.5.7(3) provides a process by which increases in land values during and