

ARIZONA GAME AND FISH DEPARTMENT IN-LIEU FEE PROGRAM DRAFT PROSPECTUS

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US Army Corps of Engineers
In-Lieu Fee
Interagency Review Team



**Draft Prospectus to Establish a State-Wide In-Lieu Fee Program
for the State of Arizona**

**Submitted to:
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Regulatory Branch**

**Submitted by:
Arizona Game and Fish Department**

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**Draft Prospectus
For a
State-Wide In-Lieu Fee Program**

1. Introduction

The Arizona Game and Fish Department (Department) proposes to establish itself as statewide sponsor of a US Army Corps of Engineers (Corps) -approved in-lieu fee (ILF) mitigation program. This Draft Prospectus is submitted as a statement of the Department's commitment, in accordance with the provisions of 33 CFR 332 to assume responsibility for, and to implement, perform, and conduct the long-term protection and management of all in-lieu fee compensatory mitigation projects approved by the Corps and accepted by the Department as program sponsor.

2. Objectives

The primary objective of the 2008 regulations for Compensatory Mitigation for Losses of Aquatic Resources (33 CFR Parts 325 and 332) (2008 Rule) is to effectively mitigate for losses of aquatic resources by utilizing a watershed approach in the planning, implementation, management and long-term protection of mitigation projects. The focus of the Department's proposed state-wide ILF Program will be an overall "no net loss" of aquatic acreage and functions for unavoidable Corps -authorized impacts, unauthorized activities in waters of the United States, and non-compliance issues related to Corps permit conditions.

An Interagency Review Team (IRT), whose members include the Corps, U.S. Environmental Protection Agency, U.S. Fish and Wildlife Service, Arizona Department of Environmental Quality, Pima County, Pima County Regional Flood Control District, and the City of Phoenix will advise the Corps on the establishment and management of the state-wide ILF Program.

3. Need for a State-wide ILF Program in Arizona

The need for a strategic and comprehensive approach to compensatory mitigation in Arizona's watersheds is critical, given the historic losses of surface waters and related functions due to dams, incompatible development, water withdrawals, non-native/invasive species, industrial discharges, incompatible agricultural practices, road construction, fire suppression, mining, land conversion/development, and the future threat of climate change.

The 2008 Rule recognizes that mitigation banks and ILF programs are environmentally preferable over permittee-responsible projects, because they involve consolidating compensatory mitigation projects and resources to target more ecologically significant functions, provide financial planning and scientific expertise, reduce temporal losses of function, and reduce uncertainty over project success. At present, no mitigation banks exist in the State of Arizona.

The Department's ILF Program proposes to utilize a watershed-based approach in selecting sites based upon need for protection, level of degradation, potential for restoration success and/or habitat values. The Department will seek to identify and prioritize aquatic resource restoration, establishment, and enhancement activities, as well as preserve existing aquatic resources to maintain or improve ecological functions of watersheds and provide suitable habitat for federally-listed and state species of special concern.

4. Qualifications of Sponsor

The Department, a state wildlife resource agency with statutory responsibility to manage and conserve wildlife and wildlife habitat, is highly experienced in planning, engineering, implementing and managing riparian and aquatic habitat for threatened, endangered and special status wildlife species in Arizona.

The Department first accepted in-lieu fees as compensatory mitigation for unavoidable impacts to aquatic resources in 1998. In 2006, the Arizona Game and Fish Commission entered into the *Memorandum of Agreement between the U.S. Army Corps of Engineers Los Angeles District and Arizona Game and Fish Commission Concerning the Establishment and Operation of the AGFD In-Lieu-Fee Mitigation Program*.

The Wildlife Contracts Branch will implement the ILF program under the 2008 Rule. Senior staff members in the Wildlife Contracts Branch will be the Project Leads for the ILF Program. Six employees hold a PhD or a Masters degree in the field of wildlife management and ecology. Collectively, they bring over 30 years of experience in Clean Water Act Section 404 mitigation planning, implementation and wetland/riparian restoration.

Department Wildlife Specialists, whose area of expertise best suits individual site-specific projects, will serve as technical managers. Wildlife Specialists typically supervise, organize, plan, analyze and conduct complex and significant wildlife research, management or environmental studies in the field. Their duties include developing or reviewing recommendations and reports on wildlife surveys, habitat evaluations, special studies and/or environmental inventories; managing budgets, and supervising staff. Wildlife Specialists will be responsible for preparing mitigation plans and monitoring reports and providing site -specific management of each mitigation project.

The ILF Program administrative manager will be a Wildlife Specialist III, who will be responsible for all recordkeeping, credit tracking, credit sales, tracking of projects, database tracking of completed and potential mitigation sites and other administrative duties.

The Wildlife Contracts Branch Chief will be responsible for reviewing all proposed mitigation projects to ensure they comply with the 2008 Rule and Corps guidelines and directives, and are consistent with the Department's mission.

The Department has carefully reviewed the 2008 *Final Rule for Compensatory Mitigation For Losses of Aquatic Resources*, and employees of the Wildlife Contracts Branch have attended ACOE-sponsored In-Lieu Fee training courses and workshops in Tucson, Arizona

and Costa Mesa, California. The Department believes it is fully capable of assuming the responsibilities as an ILF program sponsor of a watershed-based approach to compensatory mitigation projects to achieve “no net loss” of wetland acreage and function.

5. Department’s current ILF projects

The Wildlife Contracts Branch is currently implementing an in-lieu fee project at Chevelon Wildlife Area Wetlands. Tasks completed include surveys for Southwestern willow flycatcher and other passerine birds; an assessment for Threatened and Endangered species; a feasibility report, including an evaluation of water storage and delivery systems for implementing three wetland restoration design alternatives; installation of a wildlife friendly livestock exclusion fence to protect the site in perpetuity; and soil sampling to identify areas conducive to propagation of cottonwood study plots. Four cottonwood study plots have been established. In spring 2011, 1800 cottonwoods were planted and invasive vegetation removed. Tasks currently underway include a 60 percent design plan for wetland and riparian corridor areas. Evaluation of these plots (in conjunction with the Cottonwood Ecology Group at Northern Arizona University) will aid the Department in determining the proper genetic strain needed to re-establish native riparian vegetation.

Another ongoing in-lieu fee project is located at the Powers Butte Wildlife Area just outside Buckeye, Arizona in Maricopa County. For this project, the Department has conducted Threatened and Endangered species and baseline pre-restoration surveys for avian, small mammal, and herpetofauna species occurrence. A well and irrigation system has been restored to functionality and wetlands contoured. Over twenty-one acres of native plantings (cottonwood/willow and emergent wetland) have been planted and maintained and five acres of moist soil unit cells established.

The Department will be monitoring these areas in the spring of 2012 for success and invasive species encroachment. Field preparation of moist soil unit cells is planned for the fall, and a mesquite bosque planted and subsequently monitored for invasive species encroachment.

6. Aquatic Resource Goals and Objectives

The goals and objectives for the state-wide ILF Program are to:

- a) Assess ecosystem functions and values (not just impacted acreage) of aquatic resources and associated habitats that have been degraded or destroyed as a result of activities conducted in compliance with or in violation of Section 404 of the Clean Water Act of 1972 in determining compensatory mitigation requirements.
- b) Preserve and restore state wetlands and other aquatic resources for the benefit of federally-listed and Arizona species of special concern.

- c) Provide a professionally-managed alternative to permittee-responsible compensatory mitigation.
- d) Minimize the temporal loss of functions and services by gaining approval of mitigation sites in advance or concurrently with mitigation needs.
- e) Provide projects and services to meet current and future demand for credits.
- f) Achieve verifiable improvements on a watershed basis.
- g) Establish a long-term funding mechanism for the protection and management of mitigation projects.

7. Establishment and Operation of the State-wide program

a. The Statewide ILF Instrument

The structure of the Department's ILF Program is outlined in this statewide ILF Instrument, which is intentionally broad and will set the framework under which Department-sponsored ILF projects will be identified, funded, operated, maintained and managed. The ILF Instrument will include a compensation planning framework to select, secure, and implement aquatic resource restoration, establishment, enhancement, and preservation activities utilizing a watershed approach.

b. Service Areas

Service areas will be sized appropriately to ensure that the aquatic resources provided by an ILF project will effectively compensate for expected adverse impacts. Priority will be given to compensatory mitigation projects in the same geographic service area where impacts occur.

AGFD proposes that service areas be the eight watersheds defined by the USGS Hydrologic Unit Codes (HUC-4) within the State of Arizona (Figure 1). These include the Lower Colorado/Lake Mead (1501), Little Colorado (1502), Lower Colorado (1503), Upper Gila (1504), Middle Gila (1505), Salt (1506), Lower Gila (1507) and Sonora (1508). Proposed service areas for individual ILF projects will be identified in site-specific mitigation plans, based on an analysis of the extent of ecologically similar areas, the expected amount and type of mitigation required in the service area (demand) compared with the aquatic resources and amount of credits that are expected from an ILF project, population and growth information, ongoing watershed management programs, and the watershed's compensation planning framework. Due to the relatively small size of the 1508 HUC, it is proposed that impacts occurring within that HUC may be mitigated within any of the adjacent HUCs (1504, 1505 or 1507), whichever is most appropriate and agreed upon by the Corps. Final service area determinations will be made by the Corps in consultation with the IRT.

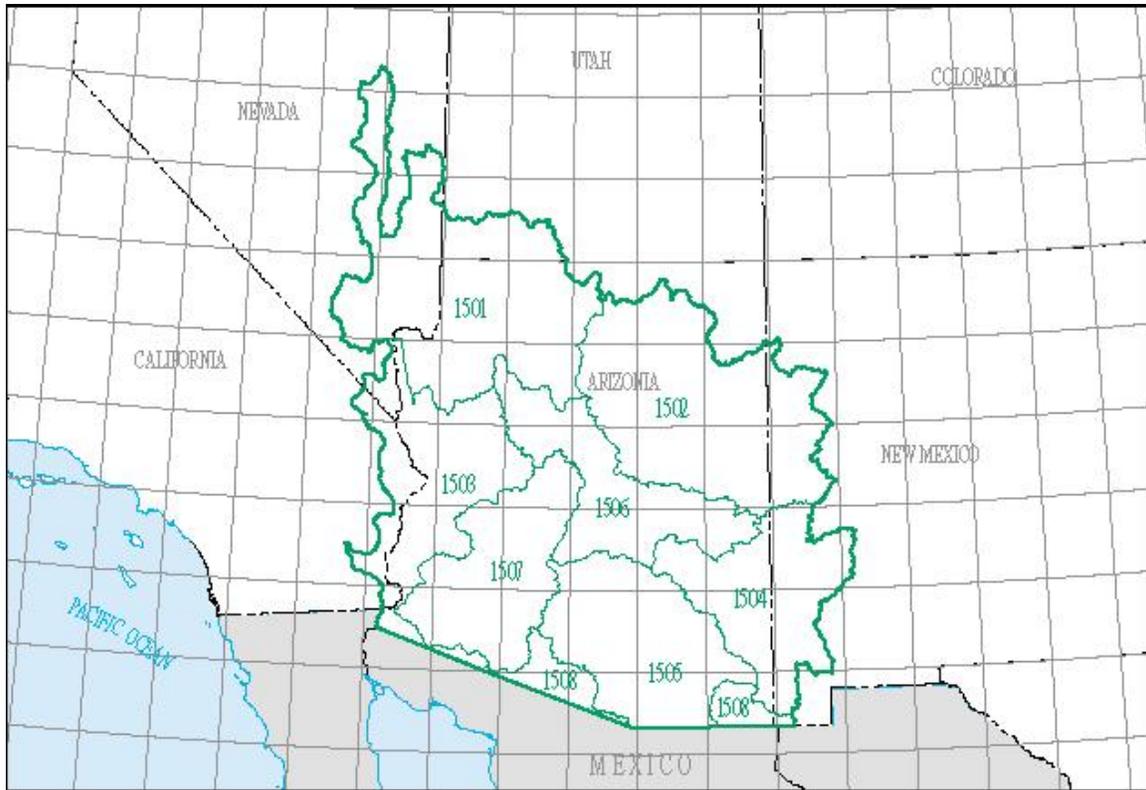


Figure 1. Arizona Watershed Hydrologic Units Using HUC-4 Unit Code Designations.

The watershed approach to compensatory mitigation includes, to the extent practicable, an inventory of historic and existing aquatic resources, including identification of degraded aquatic resources, and identification of immediate and long-term aquatic resource needs within a given watershed that can be met through mitigation projects. Mitigation planning efforts for the ILF Program will seek to identify and prioritize aquatic resource restoration, establishment, and enhancement activities, and preservation of existing aquatic resources that are important for maintaining or improving ecological functions of a watershed.

Proposed service areas for individual ILF projects will be identified in mitigation plans. Priority service areas around the state may be those that have an existing obligation for mitigation, have an anticipated demand for compensatory mitigation based on possible future unavoidable impacts, the overall water quality and associated habitat values of the proposed project's aquatic system to the watershed and the need for mitigation based upon the current or anticipated levels of possible degradation. Mitigation credits will be determined using the Corp's permits authorization criteria for ratios and credit calculation or other science-based methodology which the Department deems appropriate.

c. Mitigation Plans

Each mitigation project will have a separate mitigation plan prepared by the Department for review and approval by the I R T. Mitigation plans will include the plan objectives (with an emphasis on self-sustaining features once performance objectives are achieved), compensation planning framework, site selection rationale, the site protection instrument,

baseline data, determination of credits and how they were calculated; mitigation work plan; maintenance plan, monitoring criteria and requirements, including ecological performance standards for determining mitigation success, the long-term management plan and long-term funding mechanisms.

Typical mitigation activities will include xeroriparian or riparian wash restoration, replacement and buffer establishment, cattle exclusion, invasive species removal, wetland creation, enhancement and/or restoration, and any other projects that may provide an improved function and service to Waters of the United States adjacent habitats. All projects will involve water quality and habitat improvement aspects that will benefit the overall watershed. Projects may be proposed by the Department or by permit applicants such as private developers, the federal government, state agencies, and municipal or county governments. The Department will remain responsible for the implementation, performance, and long-term management of all compensatory mitigation projects.

d. Credit Accounting

The Department may only generate credits from an ILF project when a net benefit to aquatic resources is created at a project site. Credit generation may be based on the standard mitigation ratios established by the Corps, or based on a functional assessment and evaluation methodology approved by the Corps. Credits may not be sold prior to approval of the ILF Project mitigation plan. Each mitigation plan will include a credit release schedule referenced to performance standards.

8. Example of a priority watershed project: The San Pedro River

The San Pedro River is one of the few remaining free-flowing perennial streams in the southwest and its riparian forest supports several endangered species and migratory birds. Total annual streamflow of the San Pedro River at Charleston has decreased by about 66 percent from 1913 to 2002, and changes in upland and riparian vegetation have been identified as likely major factors. From 1973 to 1997, the area of grasslands decreased by 16 percent, the area of desert scrub decreased by 22 percent, and the area of upland mesquite woodland increased by 400 percent. The changes in upland vegetation from grasslands to woody plants can affect high flows (runoff) and low flows (ground-water discharge). *Trends in Streamflow of the San Pedro River, Southeastern Arizona* (U.S. Geological Survey Fact Sheet 2006-3004); *Trends in Streamflow of the San Pedro River, Southeastern Arizona, and Regional Trends in Precipitation and Streamflow in Southeastern Arizona and Southwestern New Mexico* (U.S. Geological Survey Professional Paper 1712).

The Department recently acquired three parcels (and associated water rights) along the lower San Pedro River in connection with a natural resources damages settlement agreement in bankruptcy proceedings for ASARCO LLC. *In re ASARCO LLC, et al.* (Bankr. S. D. Texas No. 05-21207). All three parcels have dense riparian habitat, high ecological value and species diversity, including a high occurrence of endangered Southwestern willow flycatchers (*Empidonax traillii extimus*). , neo-tropical migratory

birds, nesting raptors and various waterfowl species. The properties include a linear riparian deciduous woodland consisting of approximately three hundred fifty acres of cottonwood/willow/tamarisk forest flanked by a mesquite bosque ribbon of one hundred fifty acres. This riparian woodland extends alongside a 7.25 kilometer perennial section of the San Pedro River. Approximately 30% of the riparian area is covered with nonnative vegetation, primarily salt cedar (*Tamarix* spp.). The site borders current Salt River Project and Nature Conservancy mitigation sites that were created from the loss of wetland habitat that supported the Southwestern willow flycatcher.

In-lieu fee mitigation on these properties could enhance aquatic resource functions and contribute towards the conservation of additional riparian habitat for federally endangered and other obligate wetland/riparian species with projects such as salt cedar removal and cottonwood/willow plantings. The Department desires to remove and replace invasive *Tamarisk* with native cottonwood and willow plantings. As invasive *Tamarisk* creates high levels of soil salinity, removal of *Tamarisk* increases the quantity and quality of available water for the river and for native plantings within existing sub flows.

Under the terms of the bankruptcy settlement agreement, ASARCO and its successors have the exclusive right to conduct ACOE 404 mitigation projects consistent with the Department's restoration work on the properties on these parcels for a period of five (5) years from the effective date of the 2009 settlement, and a further right of first refusal regarding mitigation projects that are proposed for the Department's San Pedro properties and have been approved by the relevant government authorities.

In October 2011, the Arizona Game and Fish Commission authorized the Department to purchase the Triangle Bar Ranch, which consists of four large parcels totaling approximately one thousand deeded acres with associated water rights along the lower San Pedro River. Three of the parcels are located across the San Pedro River and adjacent to the Department's San Pedro properties. Eight hundred of the acres represent riparian habitat, with the remaining two hundred acres consisting of uplands. Improvements to this property under the ILF program would be focused on removal of invasive vegetation and improving the connectivity and ecosystem functions of the lower San Pedro River to benefit recovery of species listed under the Endangered Species Act.

9. The In-Lieu Fee Program Account

All ILF Funds will be deposited in the Arizona Game and Fish Donation and Trust Fund Account (Account), with individual sub-accounts dedicated to specific project sites as described below. The terms and conditions contained in the ILF instrument and approved mitigation plans will govern authorized fund expenditures, which will be dedicated to the selection, design, acquisition, implementation and management of the in-lieu fee compensatory mitigation projects.

The 2008 Rule (33 CFR 332.8.i) requires the ILF sponsor to establish a program account prior to accepting in-lieu fees from permittees. An ILF program account has the following requirements:

1. An account at a FDIC-insured financial institution.
2. All interest and earnings accruing to the account must remain in that account for use by the ILF program for compensatory mitigation.

All Corps Section 404 in-lieu fee funds received by the Department are considered private trust funds, defined in A.R.S. § 35-149(A) as funds subject to refund or return to sender. All in-lieu funds will be deposited in the Account, established pursuant to A.R.S. § 35-149(A). This statute authorizes state agencies receiving private funds received for the purpose of defraying state agency expenses, or for work done under the state agency's direction, to open a donation and trust fund account with the Arizona State Treasurer. The Treasurer's Office invests the trust funds in diversified pooled fixed income investments and bonds through the Bank of America, its contracted servicing bank.

A.R.S. § 35-316 authorizes the Treasurer's Office to establish investment pools for the collective investment of trust monies held by the State of Arizona. The trust funds are managed by portfolio managers within the Treasurer's Office.

All in-lieu funds deposited in the Account will have a designated ILF subaccount for each ILF project site, which identify the source of the funds; the terms and conditions and the purpose for which they were received; the name of the fund administrator (the Arizona Game and Fish Department) and the name of the person authorized to approve expenditures from the subaccount. All subaccounts are maintained separate and distinct from all other funds in a donation and trust fund account. A.R.S. § 35-149(B).

Funds from Department trust subaccounts are withdrawn through a requisition and invoice process as authorized by a Branch Chief or designee. The Department has multiple internal levels of security and authorization in place within its Procurement and Accounting Sections. Warrants from subaccounts are issued by the Arizona Department of Administration.

The Treasurer's Office issues monthly statements for all state agency Donation and Trust Fund accounts, and credits all such funds with accrued earnings and interest based on the principal amount of each fund balance. A.R.S. § 35-316(C). Earnings and interest are thereafter allocated to the various subaccounts within the Account in proportion to the funds credited to each subaccount.

As all ILF funds, including principal, accrued earnings and interest in the Account's subaccounts are designated private trust funds by operation of law, such funds are *not* subject to legislative appropriations or "sweeps".

10. Long Term Management Strategies

The Department will assume responsibility for ensuring the long-term protection of each ILF project as a functioning aquatic resource. Adequate long-term financing mechanisms are an essential component for project success. One method is to include in the cost of each credit released an appropriately calculated percentage to build an endowment trust to provide income for long-term management and monitoring of mitigation projects. The Wildlife Contracts Branch is analyzing methods of long-term management funding, including methods of calculating annualized stewardship and organizational costs based on a software program by the Center for Natural Lands Management (Version 1.03 2007).

11. Site Protection Requirements

The type of ownership and long-term management strategy will vary by mitigation project site.

The 2008 Rule, 33 C.F.R. 332.3(h) requires the project site to be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust).

The Rule at 33 CFR 332.7 assumes that title ownership alone of a project site by a resource agency provides the necessary long-term site protection, based on the assumption that a resource agency or non-profit is committed to long-term protection of the project and would not act in a manner contrary to that interest. The Department is a state resource agency with statutory responsibility to manage and conserve Arizona wildlife and wildlife habitat. That responsibility would include the management consistent with the terms and conditions of any mitigation and long-term management plan approved by the Corps in connection with a compensatory mitigation project situated on Department-owned property.

Where an ILF mitigation project is or has been placed on Department-owned property, no additional recorded site protection measures are necessary. In the event the Department proposes any incompatible change in use of Department-owned property set aside for compensatory mitigation, the Department will assume the responsibility to submit alternative compensatory mitigation proposals acceptable to the ACOE.

For privately-owned lands upon which an ILF mitigation project is proposed, the Department, as ILF sponsor, will draft and record a perpetual Deed of Conservation Easement in a form acceptable to Corps and thereafter monitor and enforce the deeded permanent site protections.

Arizona Revised Statutes §§ 33-271 through 33-276 authorize the use of conservation easements to preserve Arizona's natural ecosystems. The Department is qualified to act as a "holder" of a conservation easement pursuant to A.R.S. §§ 33-271 and is a "qualified organization" within the provisions of Sections 170(b)(1)(A)(v), 170(h) and

170(c) of the Internal Revenue Code of 1986, as amended, qualified to acquire and hold conservation easements.

12. Program Reporting

The Department will submit to the District Engineer an annual report ledger showing the beginning and ending balance of available credits and permitted impacts for each resource type, all additional and subtractions of credits, and other changes in credit availability in accordance with 33 CFR 332.8(q).

The Department will also submit annual reports with the following information for each ILF project in accordance with 33 CFR 332.8(i)(3):

1. The Corps' permit number.
2. The service area; the amount of authorized impacts, the amount of required compensatory mitigation.
3. The balance of advance credits and released credits at the end of the report period for each service area.
4. A statement of activities performed for the reporting period.
5. A monitoring report with a comparison to performance standards.
6. An explanation if performance standards are not being met; any proposed site modifications, design changes, revisions to maintenance requirements, and/or revised monitoring requirements; and any adaptive management strategies undertaken or planned for the upcoming year.
7. Plans, maps, and/or photographs to illustrate site conditions.

13. Financial Reporting

The Department will also submit an annual financial reporting statement for each ILF project. The report shall describe all income, disbursements, and interest earned with respect to each ILF Project subaccount for the state's previous fiscal year (July 1 to June 30).

The statement will detail all income, disbursements and interest earned in each ILF subaccount within the Account, including date(s) in-lieu-fee monies were received and a breakdown of expenditures (cost of land acquisition, project planning, construction, monitoring, maintenance, contingencies and administration).

The statement will also include the Department's evaluation of the adequacy of the funding mechanisms for future long-term management activities, given the effects of increased costs related to mitigation activities, interest rates and the current state of the economy.

The Corps will retain the right to audit all books and records of the Department upon reasonable prior notice. Pursuant to A.R.S. §§ 35-214 and 35-215 and A.R.S. § 41-

1279.04, as amended, all books, accounts, reports, files, and other records of the Department shall be subject at all reasonable times to inspection and audit by the Corps. The Department shall also provide for access to project sites by IRT members or their designees at reasonable times as necessary to conduct inspections and compliance monitoring.

2. ILF Contacts

AGFD Contacts

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