

OVERVIEW OF C.A. HUGHES MIDDLE SCHOOL WETLAND MITIGATION PROJECT

Prepared for the City of Mesquite by Partners In Conservation

November 3, 2008



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BRIEF DESCRIPTION OF PROJECT:

Mitigation work will occur on 16.96 acres depicted on the title page map wherein the following habitats will be restored and/or constructed:

- 11.69 acres of wetlands
- 4.14 acres of riparian habitat
- 1.13 acres of upland habitat
- 1.36 acres (riprap and road) will not be restored).

The City of Mesquite received a compensatory fee from Pulte Properties to administer mitigation for 1.73 acres; the remaining 15.23 acres will become a mitigation bank for the City of Mesquite, thus ensuring the ability to develop in the future.

The overall goal is to create ecologically functioning riparian and upland areas that are self-sustaining in the long term. This will be accomplished by removing non-native invasive species, transplanting native vegetation, and monitoring and maintaining the site to document progress and to ensure success.

Additionally, OHV traffic must be restricted to allow the young vegetation to become established. Signage, post and cable fencing, and an intensive education program will accomplish this objective. Several supplementary education projects will be developed to actively involve the middle school students in the study of wetlands and riparian habitats; it would be amiss to not take advantage of this golden opportunity to provide Mesquite students with unique, hands-on learning experiences in their own backyard.



BASELINE DOCUMENTS:

**C.A. Hughes Middle School Wetland Mitigation and Monitoring Plan
Compensatory Mitigation Plan for Nationwide Permit #39 (2007-649-SG)
Clark County School District / City of Mesquite Interlocal Agreement
Partners In Conservation's City of Mesquite Business License #987787
Memorandum of Agreement between the City of Mesquite and Partners In Conservation
Task Orders between the City of Mesquite and Partners In Conservation
City of Mesquite Master Plan: Parks, Trails and Open Spaces Element
City of Mesquite Best Management Practices
City of Mesquite OHV Ordinance
Restoring Riparian Habitats/Stabilizing Stream Banks Workshop Manual**

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BENEFITS:

- Pulte Properties mitigation obligation is fulfilled
- A Mitigation Bank for future development in the City of Mesquite is created and completed
- Work is done by a local non-profit, freeing City resources, and completing tasks far under industry estimates of \$24,500/acre
- Local sub-contractors are used, thus benefiting the economy of the City of Mesquite
- Local volunteers will be trained and will complete many of the tasks; this provides:
 - * active involvement and ownership by residents of the project
 - * opportunities for residents to learn about the benefits of wetlands and riparian habitats
 - * appreciation for wetlands and an active river system in the middle of the Mojave Desert
 - * funding for local youth and service groups whose members volunteer, thus providing a means for their well-deserving programs to be funded and adding to the economy of Mesquite
- Residents, snow-birds, tourists, and youth receive information and education regarding safe and responsible OHV practices as well as information regarding the City of Mesquite's OHV ordinances
- C. A. Hughes Middle School receives hands-on, unique educational opportunities regarding the Virgin River, wetlands, and riparian habitats and ecosystems, as well as cutting-edge opportunities to perform meaningful and relevant scientific research



PROJECT COMPONENTS:

- Obtain Army Corp Letter of Approval**
- Install Post and Cable Fencing, Signage, and Natural Barriers**
- Implement OHV/ATV Education Element**
- Remove Large Tamarisks**
- Remove Small Tamarisks and Other Non-Natives**
- Plant Native Vegetation**
- Water Native Vegetation until Established**
- Obtain Funding for CHMS Participation/Education**
- Implement CHMS Projects**
- Implement 3—5 Year Maintenance and Monitoring Program**

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SCHEDULE OF WORK:

Description of Work	Timeline
<u>Phase One / Task Order #1</u>	
Obtain Army Corp approval to start work	previous ongoing _____ 11/08 complete
Post and Cable, signage, natural barriers	commence 11/08 _____ 01/09 complete
OHV/ATV education component	previous ongoing _____ 04/09 complete
<u>Phase Two / Task Order #2</u>	
Removal of large tamarisks	commence 11/08 _____ 02/09 complete
Removal of small tamarisks, volunteer	commence 11/08 _____ 02/09 complete
Obtain cuttings, native plants, seeds	commence 12/08 _____ 02/09 complete
Planting of native vegetation, volunteer	commence 12/08 _____ 03/09 complete
Watering of vegetation, volunteer	commence 01/09 _____ 06/09 *
* (watering of selected vegetation will be based on health of plants, weather, etc. and may continue through summer months or longer)	
Obtain funding for CHMS education programs	commence 11/08 _____ 05/09 complete
Develop and implement CHMS education programs	commence 11/08 _____ 05/10 **
** (education programs may extend for several school years depending on funding, etc.)	
<u>Phase Three / Task Order #3</u>	
3 — 5 year maintenance and monitoring program, utilizing volunteers, to be developed and implemented per details and specifics outlined in CA Hughes Middle School Mitigation and Monitoring Plan	



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SUMMARY:

As the City of Mesquite sits poised to enact their own Habitat Conservation Program, as the City anticipates, plans, and proceeds with organized, controlled growth, and as the importance of being better stewards of our precious resources settles upon all of us, this unique project and partnership begins to take form. It is no less the embodiment of all of the above, a miniature habitat conservation program, a mitigation plan that enhances growth opportunities (with a Mitigation Bank created, growth will not be delayed or hindered as was the case with Solstice Properties) and a golden opportunity to enhance and preserve resources, protect fragile riverine habitats, and create additional wetlands and riparian zones where flood-raised acreage now exists.

Perhaps the stewardship aspect of this project is actually the most important of all with results that reach into the future and touch lives that we are not even contemplating today. The forethought the City of Mesquite had, in developing a beautifully situated hike/bike trail adds an element few mitigation plans can take advantage of—that of providing informative kiosks periodically along the trails that frame this area. These kiosks will provide information about this project, the uniqueness of the Virgin River, the necessity of protecting wetlands, the roles these ecosystems play in our desert, the responsibilities we all share in preserving the river of life that flows through Virgin Valley—the information that can be informally passed on to all who use the trail is literally limitless.



**“Show me and I forget,
Teach me and I remember,
Involve me and I understand.”**

Education takes stewardship to a much higher level; when understanding is achieved, the by-product is ownership. When education instills ownership in anyone, you instantly have a partner for life. PIC has seen evidence of this time and time again; our tortoise fencing project along I-15 on the Mormon Mesa (1/3 of the 27 miles were done by Virgin Valley residents) is the perfect example. Youth point with pride to ‘their section’; they built that fence that protects tortoises. They understand the concept; they actively participated; that tortoise fence is THEIRS.

This project incorporates education, not only by lessons, but also by using volunteers—local youth and residents—because not only do you have an ongoing PR-perfect project, you will ultimately have hundreds, if not thousands, of ‘owners’ of this project. The Scout troop that pulled up small tamarisks, the high school girl’s baseball team who planted willows, the boxing club who waters the plants,.... The possibilities are endless. Those that participate, those owners, they will not be the ones littering the area, they will not be the ones riding an ATV over small plants, they will not be the ones defacing signs; they are invested in this project, it becomes their own, they become this area’s protectors. No amount of money can buy that guardianship; it only happens because they were actively involved.

Finally, this project will spend considerable time on education programs; not because it is mandated, but because it is the right thing to do and because the educational opportunities are a golden gift that few educators are ever given. A wetlands project in the backyard of the Middle School; riparian habitat literally next to school property—genuine gifts for students to learn hands-on, to create research projects, to collect useful data that agencies need—gifts to spark that light in a student, to give them career choices, to make learning fun and meaningful. To not seek out grants to fund educational programs would not only be amiss, it would be wrong.

The final educational component involves OHV responsible use; this component is essential to this project as no one wants to waste money and time planting native vegetation, only to have those plants destroyed by thoughtless recreationalists.

Therefore, it is imperative to provide information and education to users, both resident and tourist alike, about the general points of responsible use and about the specifics of OHV use in relation to this project, to the City of Mesquite’s OHV Ordinances, to the many open trails and opportunities that legally exist, and to the importance of only staying on roads and trails, particularly the one designated OHV trail along the Virgin River. In conjunction with this project, it would be perfect timing to define that trail with natural boundaries and ample signage. Although it is not part of this project, PIC commits 100% to assisting the City with that specific task. It isn’t mandated, but it is an ideal moment to do so, correlating OHV education with the re-introduction of the legal trail along the Virgin River—and besides, it is the right thing to do.

