Final Report
NCCP Implementation Workshop and Land Acquisition Module
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The Coachella Valley Association of Governments (CVAG) has successfully completed the requirements of our Local Assistance Grant project by developing a website that links an online geographic information system (GIS) with a Laserfiche document management system and hosting a one day conference on information management in regional conservation plans. The website, which is publicly available at [http://cvag01.mojavedata.gov/CVMSHCPViewer/](http://cvag01.mojavedata.gov/CVMSHCPViewer/), provides the requirements of the Coachella Valley Natural Community Conservation Plan (CVNCCP) for every parcel within the 1.2 million acre area of the plan and links to all the documents related to the acquisition of parcels for conservation.

As the Natural Community Conservation Planning process has matured and the size and complexity of the plans have increased, the tools needed to monitor and track acquisitions in a coherent fashion have not kept pace. Habitrak and other early tools have worked well for some of the original plans in terms of incremental reporting of conservation and development within a given area. However, these early tools were not designed to integrate and track the other key aspects of plan implementation (such as centralized administration of preserve management, fee collection, and monitoring or purchase and use of conservation credits) in a spatially coherent framework. The CVNCCP tracks 27 species and 27 natural community types, as well as ecological processes and wildlife corridors, within 37 distinct subunits.

The current project focuses on the tracking of acquisitions as the first step in developing an overall database for all aspects of the CVNCCP. While the acquisition of property at first seems straightforward, the tracking of credit for the CVNCCP is actually quite complicated. The CVNCCP credits conservation of land into three categories: 1) the Local Permittees, represented by the Coachella Valley Conservation Commission; 2) the state and federal governments and; 3) Complementary conservation, which is conservation by other entities such as private conservation groups. The basis of credit is the source of the funding for the acquisition.

The Coachella Valley has a long history of partnerships between local, state and federal governments as well as private organizations. This cooperation has produced great successes such as the acquisition of the 9,000 acre property that was a failed developed called Joshua Hills. The Joshua Hills acquisition also provides a good example of the difficulty of tracking credit within the CVNCCP. Conservation credit within the CVNCCP is based on the source of the funding for an acquisition. The Joshua Hills acquisition partnership included CVAG, California State Parks, California Department of Fish and Game, the City of Palm Desert, and the private conservation organizations, the Friends of the Desert Mountains (FODM) and the Nature Conservancy. The approximately 9,000 acres was divided up among the purchasers on a pro rata basis determined by the portion of the total $26 million dollar cost that each participant contributed. CVAG purchased a portion of the Joshua Hills project as part of mitigation for several interchanges on Interstate 10. CVAG later traded some land with FODM so that FODM would have land adjacent to existing Bureau of Land Management land (BLM). CVAG received several hundred acres more land as part of this exchange but CVAG’s credit did not change as that was based on its original portion of the purchase. FODM later sold its land to BLM.

This example shows that simply looking at land ownership does not necessarily give insight into the credit within the CVNCCP. In the case of the Joshua Hills acquisition, some of the land originally purchased by CVAG is now owned by BLM and CVAG actually owns land for which
it receives no credit. CVAG has a sophisticated enterprise GIS but GIS alone is not sufficient to track these transactions. Following the details of complex real estate transactions requires review of the actual transaction documents. The solution is to combine a document management system with the GIS.

The Laserfiche document management system allows documents to be scanned in and the text of paper documents to be determined through an advanced optical character recognition (OCR). There are a variety of search mechanisms allowing access to documents in the archive through document name, text within the document, keywords etc. In the current application, all documents related to a specific parcel have as a keyword the assessors parcel number (APN) so that on the CVAG website clicking on a parcel searches the document archive for documents that have that parcel’s APN as a keyword.

CVAG originally planned to have a Laserfiche document management system associated with an online geographic information system, using ArcGIS Server 10, with a connection to the internet from CVAG using Geodoc software. CVAG purchased the Laserfiche system in July 2010 and began work on connecting it to our existing ArcGIS Server. As we developed the system, it became obvious that a direct connection from the CVAG servers would not be optimal in terms of speed and capacity. Fortunately, the Mojave Desert Ecosystem Program (MDEP) offered to host the CVAG data on their extremely fast, high capacity servers. To take advantage of the MDEP servers, CVAG tested the concept of a parent database housed at CVAG with a child database at MDEP using trial licenses provided by Laserfiche. The results were excellent. An amendment to the grant was approved to replace the budget allocation for the Geodoc with licenses for the Laserfiche at the MDEP. The final system was developed as parent-child database.

A mirror of the acquisition related documents in the Laserfiche at CVAG and the CVAG geodatabase are housed on a child database at the MDEP. CVAG’s ArcServer license was
transferred to the MDEP site and a separate license for Laserfiche purchased for use at MDEP. Weblink software allows write and edit access into the MDEP child database without access into the overall parent database at CVAG. This provides a model for other organizations to use the child database without compromising the parent database at CVAG. The Coachella Valley Mountains Conservancy (CVMC) provides acquisition services for the CVNCCP. The CVMC is a state agency dedicated to purchasing land for conservation. In addition to performing real estate transactions for the state and CVAG, CVMC acts as the real estate agent for many others including FODM. Using Weblink, CVMC is able to enter the documents related to the vast majority of conservation acquisitions in the Coachella Valley into the database during each transaction. The parent and child databases are regularly synchronized.

The basis of CVNCCP is a complicated series of documents that includes a federal permit with numerous conditions. The requirements for a specific parcel do not appear in any one place in the documents. As part of this project, CVAG has distilled the requirements for each parcel into the online database. This information is available through a spatial search of simply zooming into a parcel and clicking on it or through entering an APN. The website includes GIS layers for all the species models, vegetation, landownership, Conservation Areas and conserved lands along with a variety of aerial imagery including 1996 United States Geological Survey Digital Ortho Quarter Quadrangles which are the baseline condition for the CVNCCP, and topographic maps as base layers. The interface is the ArcGIS Viewer for Flex 2.4, which is very similar to the interface for sites like Google Maps and Mapquest, making it easy to use for anyone who has used online maps. Appendix 1 shows an example of a search for information on a specific parcel.

CVAG is continuing to look toward expanding the online database beyond acquisition tracking. The next phase of database development will likely be administration of the fee program which would include collecting building permit information from all CVAG jurisdictions. This will also provide a detailed picture of development throughout the region at the parcel level.
Conference

On June 1, 2011, CVAG sponsored a conference on Information Management for Regional Conservation Planning at the headquarters of Esri in Redlands, CA. The conference featured presentations on innovations in information management from several regional conservation plans including the San Diego Management and Monitoring Program and Mojave Desert Inventory and Monitoring Network as well as the Coachella Valley NCCP. Over one hundred fifty people attended the conference. The conference also included software demonstrations by Esri staff. Web transmission of the conference was made available to several Department of Fish and Game employees who were unable to attend due to the state ban on employee travel. The conference received excellent reviews in the evaluations submitted by attendees. The conference has led to continuing discussions on improving information management and cooperation between NCCPs.
Appendix 1
The following example shows the retrieval of information for APN 671210001.

http://cvag01.mojavedata.gov/CVMSHCPViewer/

The Assessors Parcel Number is entered into the “Search for a Parcel” box.
Clicking “Locate” zooms the map to the parcel.

Clicking within the parcel boundary brings up a callout box giving the choice of parcel specific CVNCCP requirements or a search for documents related to the parcel.
Results from clicking on “Is this property in a Conservation Area.”

Results from clicking on “Search for documents related to this parcel.”
An example of one of the documents, the resolution authorizing purchase of the parcel.