

BY Larry Orman

A MAP FOR THE Future

What if you could find the location of any park or protected open space in the United States? By zooming in on a map you could see detailed boundaries and all nearby protected lands, and you could analyze this data to inform strategic decisions about conservation, recreation or land use planning. For the first time ever, you and millions of others would have a reliable, current inventory of all of the nation's protected areas.

NEW INITIATIVE TO
INVENTORY U.S.
PROTECTED AREAS



This long-held dream is getting much closer to reality, and that's good news for land trusts everywhere in America. As recently proposed by a government-nonprofit collaborative, the Protected Areas Database of the United States (PAD-US) will be developed during 2010-2012, resulting in greatly improved GIS inventories of these lands.

Inventorying all protected lands, from National Parks and Wilderness Areas to metropolitan watersheds and eventually most city parks, in a national database will be a tremendous advance for public agencies, nonprofits, businesses and the general public. It will improve strategic conservation planning, national assessments of the effectiveness of and need for open space funding, global reporting for

the U.S., public recreational access and collaboration among states and public agencies, to cite just some benefits.

The strategy for this inventory has been developed over the past year by the PAD-US Partnership, an innovative collaboration of public agencies (U.S. Geological Survey Gap Analysis Program, Bureau of Land Management, U.S. Department of Agriculture Forest Service) and nonprofits (Conservation Biology Institute and The Nature Conservancy, with the Land Trust Alliance now on the partnership steering committee). Other organizations and agencies have also been involved in helping develop the design of the proposed database. Funding for this effort has come from the Doris Duke Charitable Foundation

WHY A GOOD INVENTORY MATTERS — Older data for a coastal section of California (2005) shows an incomplete understanding of a region, compared to a full inventory completed in 2008 (above). Inventories as proposed in the PAD-US will help agencies and land trusts get the real picture of their landscapes.

Getting PAD-US Data

An initial version of the PAD-US data set, released by USGS in April 2009, is available for viewing and download at www.ProtectedLands.net. This initial data set builds on 15 years of effort by the Conservation Biology Institute and the USGS Gap Analysis Program. An updated version will be released in late 2009, before creating the full PAD-US during 2010-2012.

(through the National Fish and Wildlife Foundation) and the USGS GAP program.

In July, the partnership released its first major report, "A Map for the Future." Digital copies of the report and much more information is on the partnership's website, www.ProtectedLands.net.

What We Have and What We Need

In the U.S., approximately 715 million acres of land are protected in fee ownership by federal, state, local and nonprofit organizations—conservation easements may add another 40 million acres.

The PAD-US Partnership believes that this underestimates the actual inventory by 10 to 20%. In addition, some of this data is not entirely accurate or up to date, and the way characteristics and qualities of these holdings are described is not always consistent. In addition, overall standards for how to create and maintain this data are lacking.

Data about lands protected locally (below the state level) is one of the biggest gaps in current inventories—given the \$7 billion or so in local and state parks and open space funding approved in recent general elections, efforts are needed to ensure we are accounting for these new protected areas.

A number of states and federal agencies do in fact have good data and provided best-practice examples for PAD-US: Colorado, Massachusetts, California and Virginia are noteworthy. Data collaboratives in the northeast (The Nature Conservancy) and Great Lakes (Ducks Unlimited), and the BLM's federal land tracking system are other examples. But these disparate pieces do not make a truly effective system for all local, state and national entities, either public or private.

Equally important is that there has not been a funding base or an organizational structure to develop and manage an improved national inventory.

What About Conservation Easements?

PAD-US initially includes data on lands owned in fee. Data on conservation easements is more complicated to acquire and use, but is extremely important: an agency or land trust doing a conservation plan needs to know what's really protected in their landscape, and easements play a key role in completing that picture. But data about the location of easements is also very sensitive and takes a special

approach—an obstacle that has limited most data development initiatives in the past. The good news is that a special project is just getting underway with the resources to make major improvements on these issues. Commissioned by the nonprofit U.S. Endowment for Forestry and Communities, a consortium of nonprofits will be preparing the first national inventory of current easement data during 2009–2011. The Land Trust Alliance is a key participant in the project, which also includes Conservation Biology Institute, Ducks Unlimited, the Trust for Public Land, Defenders of Wildlife and NatureServe. Look for more information in a future *Saving Land*.

Carrying Out the PAD-US Strategy

To address these gaps, the PAD-US Partnership was established in early 2009, to oversee a program of improving protected land inventories. The following will be undertaken, beginning in early 2010:

- 1 Develop a much more robust** GIS database to handle the complexities of protected areas, e.g., how to define lands where a river protection corridor overlays a forest that is partly wilderness area.
- 2 Create support for states** to improve their GIS inventories—if each state can contribute a full set of data in a format that can be standardized, creating the full national inventory will be much easier. This element holds great promise for joint projects with land trusts and public agencies in particular states and regions.
- 3 Establish an effective process** for integrating federal data with the state data (and data from national land trusts, like The Nature Conservancy), a challenging technical and data management task.
- 4 Publish this data in a variety** of forms to meet the needs of many users (full data will be published at least annually).

What You Can Do

Within three years, PAD-US will provide a far more complete national picture of the extent of our protected, treasured landscapes. Implementing it will require governmental and foundation funding at all levels. The PAD-US Partnership welcomes information about opportunities to engage with states and regions that are also working on this issue, or where our support could help leverage local funding. We also encourage you to inform colleagues about PAD-US. We'll have an e-newsletter available in early fall 2009. 🍁

WE HOPE TO HEAR FROM YOU IN THE LAND TRUST COMMUNITY ABOUT THESE POSSIBILITIES! SEND AN E-MAIL TO PADUS@PROTECTEDLANDS.NET.

LARRY ORMAN IS THE EXECUTIVE DIRECTOR OF GREENINFO NETWORK, A NONPROFIT TECHNOLOGY SUPPORT ORGANIZATION THAT WORKS WITH MANY LAND TRUSTS AND OTHER PUBLIC INTEREST GROUPS (WWW.GREENINFO.ORG). HE HAS BEEN THE COORDINATOR FOR THE PAD-US PARTNERSHIP SINCE 2008.

RESOURCES

Learn more on this topic at Rally workshop D23 on October 14.

PAD-US Partnership: www.ProtectedLands.net ("A Map for the Future" report available as download)

Conservation Biology Institute: www.consbio.org

USGS Gap Analysis Program: <http://gapanalysis.nbi.gov>

LandTrustGIS (Alliance co-sponsored): www.landtrustgis.org

LandScope America: www.landscape.org