Popular urban conservation plans flawed, study finds

By Mike Lee UNION-TRIBUNE STAFF WRITER

July 15, 2006



The arroyo toad is among the 42 threatened and endangered species that live in San Diego County.

As many regions of the United States rapidly urbanize, multispecies conservation plans have become a popular method for trying to balance development and ecological needs.

The basic idea is to let builders develop a certain area in exchange for setting aside biologically important land elsewhere for open space and habitat. The arrangement appeals to government agencies and developers because it allows them to consolidate the protection of numerous species into one agreement instead of dealing with them one at a time.

But a new report suggests the balancing act might not be meeting its full potential to protect plants and animals.

Many of the conservation plans have fundamental flaws that limit or overestimate their conservation potential, according to a study led by researchers from San Diego State and UC Davis.

The sweeping survey examined 22 multispecies plans in California and five other states. It found that, on average, 41 percent of plants and animals covered in such plans haven't been proven to exist in the designated areas – a sign that these plans lacked important biological data, according to the report.

"Where's the science?" the report asks.

It also said many of the plans lack conservation measures for specific species, making it difficult to determine what lands should be preserved or how effective the programs are overall.

Some plans "appear to simply pay lip service to meaningful species protection," said lead author Matt Rahn, SDSU's director of field station programs. The study appears in the current issue of *BioScience* magazine.

Multispecies conservation plans are particularly important in San Diego County, home to one of the first such blueprints in the nation during the mid-1990s. Two more plans are being developed for the region's eastern and northern portions.

Across the county, tens of thousands of acres are protected by multispecies plans. The programs are supposed to benefit the region's 42 threatened and endangered species and a host of more common ones.

The new study quickly grabbed the attention of the U.S. Fish and Wildlife Service, which has approved about 450 conservation plans covering roughly 40 million acres nationwide. It will likely increase pressure on the agency to include more detailed conservation standards and information about targeted species in future conservation plans. It could also prompt the agency to alter the existing programs.

The report hit a nerve with Fish and Wildlife's planning experts, said agency spokeswoman Alex Pitts in Sacramento. The officials have been poring over the document, she said, and will provide a detailed response after reviewing it fully.

At first blush, Pitts said, "It appears that there is this desire on the part of the authors to have all the (species) information

before going forward. If that was possible, that would be fabulous. But it's not the real world we work in."

She said the agency has room to change its practices if the study shows something that needs to be fixed.

"We make a really strong effort to link the biological requirements of species to conservation measures," Pitts said. "They are not perfect, but it's been a process of learning how to put these things together."

Rahn, the lead author, said he realizes that not every species can get an exhaustive review. But he wants the Fish and Wildlife Service to verify assumptions about species instead of issuing permits without the supporting data.

"This is not an unrecoverable error," he said. "This is something that has a fairly straightforward solution: just provide standards ... that clearly dictate" how species qualify for conservation plans.

Rahn said he hopes the report serves as a warning and a road map for more detailed conservation plans, which he described as potentially important for the fast-developing San Diego County – home to about 3 million people – and other burgeoning areas.

The study looked at multiple-species plans in California, Hawaii, Idaho, Nevada, Oregon and Washington. It builds on other academic reviews in recent years that have highlighted shortcomings with the programs.

One study cited in the latest report said imperiled species covered under the multispecies plans were generally less likely to be protected than species covered by their own specific plans.

Rahn and his colleagues, including one from the Illinois Natural History Survey, concluded that many multispecies plans are too general and lack localized species data. In only one of the 22 plans they examined could they verify that every species targeted for protection actually lived in the conservation area.

Overall, nearly two-thirds of the unconfirmed species lacked species-specific conservation plans.

"There is an assumption that a lot of these species will automatically be protected by these generalized conservation efforts, but we don't ... have any basis for saying that," said Holly Doremus, a co-author of the report and a law professor at UC Davis.

It generally works in the favor of developers to have as many species as possible listed in the plans because it protects them from the government changing the rules down the road.

In addition, species can benefit from the plans' generic safeguards – unless their specific needs get overlooked, the report's authors said.

"Developers are getting permits to potentially harm this huge, long list of species and you really don't know whether the conservation efforts will be helpful for most of those species in many of these plans," she said.

Kim John Kilkenny, executive vice president of The Otay Ranch Company, is president of the Alliance for Habitat Conservation, a group of large landowners in San Diego County who are involved with conservation plans.

He had not seen the report in *BioScience* but he said the habitat plans served as important tools to protect sensitive lands from development.

"We believe the (plans) have a basis in good science," he said. "The (multispecies conservation) program in San Diego ... was a very lengthy, transparent program based on the best science that was available" when it was adopted.

At the Center for Biological Diversity, an environmental group prominent for its work on endangered species, urban wildlands director David Hogan in San Diego praised the latest report.

"Those numbers pinpoint with scientific precision a longstanding concern of environmentalists," he said. "With many of these plans, as they were nearing completion, developers figured out that they could grab coverage of as many species as possible without providing necessary scientific support in an effort to get their permits to kill wildlife and plants."

Some others were skeptical about the findings.

Keith Greer, deputy planning director for San Diego, said he could not comment on specific aspects of the report before

reading it. However, he questioned whether the authors were aware of all the scientific assessments used to determine which species would be included in the city's plan.

"There was a lot of documentation that went into (it)," Greer said.