

California has a rich heritage of biodiversity, with many species found nowhere else in the world (including the iconic giant sequoia trees). But California's biodiversity faces grave threats - pressures from development that eliminates habitat; water shortages that harm aquatic species in California's rivers; and climate change impacts that are shifting and altering habitats, among others. Governor Newsom has made protection of California's biodiversity a priority for his administration, issuing an [executive order](#) calling for aggressive efforts to protect the state's biodiversity.

Yet, despite this context, the state's primary legal tool to protect biodiversity, the California Endangered Species Act (CESA), has stayed mostly the same for over twenty years. CESA could use an update, given the increased threats that face California's biodiversity, and the increased understanding over the past two decades about effective policy approaches for advancing biodiversity conservation.

In [an article just published in UC Davis' \*Environs\* law review](#), I identify ways to improve CESA, such that it can be the flagship conservation statute that provides critical support to California's efforts to protect biodiversity. I survey CESA and a range of related state laws that address biodiversity, and canvass lessons from the literature examining how legal tools to protect biodiversity in the United States have worked, particularly the federal Endangered Species Act (ESA). While those interested in the details should review the full paper, below are some key highlights of my proposals:

- *Facilitate joint listing of federally-protected and CESA-protected species.* Like the federal ESA, CESA provides for the development of a list of species that are endangered or threatened and thus warrant protection under the law. However, there are many species protected under the federal ESA that are not protected under CESA. Providing a streamlined, or even automatic, system for listing federal ESA species under CESA could help provide a backstop of state protection if federal protection is ever removed, and also could facilitate streamlined permitting under both statutes.
- *Confirm protections for habitat, terrestrial invertebrates and plants.* There are three key uncertainties about the current scope of CESA protections. First, there is significant debate over whether CESA protects against modification of habitat that CESA-listed species depend on. Second, there is uncertainty about the extent to which CESA protects terrestrial invertebrates. Third, there is uncertainty about the extent to which CESA protects plants that are also listed for protection under the states Native Plant Protection Act (NPPA). Eliminating all of these uncertainties would help the vast majority of CESA-listed species whose habitat is under threat, and also for two groups of species that are foundational to ecosystems and biodiversity more broadly.
- *Provide more guidance for listing populations.* The federal ESA allows for listing

populations of species, even if the species as a whole does not warrant protection. Courts have interpreted CESA as giving the state the power to undertake similar steps, but there is little guidance in the law about whether and how to use that power. Greater guidance, including a listing of the biological, economic, and social factors that should be relevant to deciding whether to list populations, would be helpful in producing a more predictable listing process.

- *Provide more clarity for species listing decisions.* Likewise, the statute could provide more clarity as to when any species should be listed for protection. Currently the factors for listing decisions are in the regulations, not the statute. Codifying those factors in the statute, making them mandatory for both listing and delisting decisions, and providing (where appropriate) quantitative measures for listing and delisting decisions would provide more predictability and transparency. These changes would also allow for listing and delisting decisions to be made more quickly, and therefore respond to changes in species status.
- *Provide greater incentives to protect species before listing.* A key limitation of biodiversity laws can be delays in providing legal protections for endangered species until the species are on the edge of extinction – making protection and recovery much more expensive and difficult. Providing incentives for private and governmental actors to protect species before they are listed can be cheaper, and more effective in advancing conservation. CESA could be amended to give greater authority to the state to provide those incentives, such as regulatory exemptions for actors who proactively move to protect species before they are listed.
- *Make recovery the center of CESA.* Ultimately, the goal of CESA is to improve the condition of listed species so that they don't need protection any more – recovery. However, few CESA-listed species have plans that outline how recovery could be achieved (though CESA-listed species that are also ESA-listed may have federal recovery plans). Moreover, detailed recovery plans could provide guidance for permitting and investments (public and private) that could streamline regulatory burdens, improve the effectiveness of conservation efforts, and facilitate ecosystem-wide conservation actions that can benefit a wide range of species. Advancing species recovery could also be made a requirement for the issuance of permits under CESA, something that is not currently true for at least some permits.
- *Repeal fully protected species provisions.* California law currently provides very stringent protections for a group of species specifically identified in state law as “fully protected” species, regardless of their conservation status. It is also significantly more difficult to obtain permits to undertake actions that might affect these species. Conservation law should focus its efforts on species that require protection, and should be responsive to changes in the conservation status of species.

- *Provide streamlined permitting for actions that help species.* Currently the state has a major push to eliminate regulatory obstacles for projects that restore ecosystems, a key component of protecting biodiversity. Advanced recovery planning can help support this effort by identifying the kinds of actions that warrant reduced regulatory burdens.
- *A voluntary ecosystem protection program.* One theme of the literature examining biodiversity policy has been that protecting ecosystems is more efficient and effective in general than protecting the species that depend on those ecosystems. While California has taken notable steps to advance ecosystem protection (such as the Natural Community Conservation Planning Act (NCCPA)), more could be done. Payments and regulatory incentives for landowners to take voluntary efforts to protect ecosystems could help - such a program could build on existing programs like the state's Regional Conservation Investment Strategies (RCIS).
- *Compensation for small landowners.* Small landowners may face significant obstacles to comply with CESA, including getting access to technical support, understanding a complex legal system, and limited resources to implement conservation actions. Compensation that is focused on small landowners could facilitate compliance for these landowners, advancing conservation and reducing heavy regulatory burdens on those who may be least able to comply.
- *Streamlining permitting for small landowners and low-impact actions.* Likewise, providing easier compliance mechanisms for small landowners, and for activities that have low impacts on species and ecosystems, could make CESA work better with less cost on Californians. The state could use approaches such as general permits, which provide less upfront requirements for permit applicants. Detailed recovery plans could provide insights about what kinds of actions could qualify for general permits, by identifying what actions are likely to cause the most harm to CESA-listed species.

The recent attention to biodiversity protection in California should provoke efforts to reform the state's landmark biodiversity law. My proposals are intended to be a starting point for a conversation on that effort. Thus, while many of these proposals would best be implemented as part of a package of reforms, it is also true that many of these changes individually would make the law a better one, better advancing the goals of biodiversity conservation in California while also reducing burdens for landowners and others.