

The Role of Working Lands in Providing Public Conservation Benefits

PART II: POLICY CHALLENGES TO CONSERVATION

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The Property and Environment Research Center is a nonprofit institute dedicated to improving environmental quality through property rights and markets.

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INTRODUCTION

onservation means harmony between men and land," Aldo Leopold noted in a 1939 address, The Farmer as a Conservationist. "When land does well for its owner, and the owner does well by his land; when both end up better by reason of their partnership, we have conservation. When one or the other grows poorer, we do not." As Leopold described, it is in the best interest of owners of working lands to care for the land because they rely upon it for their livelihoods. Landowners' bottom lines are tied to stewardship practices that balance land sustainability and economic viability. Their conservation efforts, therefore, benefit both the environment and their operations.

Privately owned farms, ranches, and forests, collectively known as working lands, are the cornerstones on which our nation was built. These lands not only produce much-needed food and fiber while sustaining rural economies, but they provide many conservation benefits as well, including clean water, wildlife habitat, and ecological diversity. These benefits often extend beyond property lines, serving the interests of both landowners and the public. Working lands can provide these benefits because environmental stewardship often goes hand-in-hand with the production of crops, livestock, and timber.

In this two-part report on private conservation on working lands, Part I, A Collection of Case Studies, celebrated examples of ranchers, farmers, and timber producers managing their properties with a conviction for conservation. While the case studies show conservation on working lands is possible, well-intentioned government policies sometimes make it very difficult for landowners to steward their property in an environmentally friendly way.

Part II, Policy Challenges to Conservation, examines several policies that counterproductively discourage environmental conservation on working lands. Too often, government policies that aim to conserve environmental resources are filled with complex regulations, unnecessary red tape, and burdensome taxes that undermine property rights and increase the cost of environmentally conscious business decisions. Part II also poses potential reforms that would make it easier for more landowners to engage in conservation efforts similar to those discussed in the case studies of Part I.

Policies that provide disincentives for conservation efforts should be reformed to promote property rights and private conservation. It is essential that landowners maintain authority over their working lands so that conservation efforts can prosper. Creating institutions that cultivate collaboration between landowners and bring parties together to contract for ecosystem services not only allows landowners to maintain authority over their property but also encourages conservation. Cutting red tape and reducing the tax burden on private lands would help turn environmental liabilities into assets.

Part II of this report specifically addresses five threats that can hinder conservation efforts on private working lands, and it proposes solutions for each:

The Endangered Species Act: The Endangered Species Act seeks to protect species that are at risk of going extinct. It also aims to protect the habitats of these species. However, when a species listed under the act is found on private property, the U.S. Fish and Wildlife Service can require an owner to restrict his or her use of their land without compensation for the change in use. This risk can perversely spur landowners to try to prevent endangered species from taking up residence on their property in the first place. To encourage cooperation with more landowners when it comes to protecting endangered species, the Safe Harbor Agreement application process should be shortened and conservation-banking markets should be explored. (Page 6)

The Clean Water Act: The Clean Water Act was passed to clean up the rivers, lakes, and other "waters of the United States." Under the act, anyone who discharges a pollutant—including "clean fill" material such as soil—into a waterway is required to get a permit, even when the purpose of the work is conservation. For working landowners who use a great deal of water, the permit requirement can make it difficult to engage in conservation activities such as stream-bank restoration. Water-trading markets are an alternative that would allow farmers who improve water quality to earn credits that they could then sell to polluters, leading to a net decrease in water pollution. (Page 10)

Water-Trading Restrictions: In California, drought has left farmers and wildlife without essential water in recent years. Traditional regulatory solutions, including water-use restrictions, have not proven to be sustainable approaches to conserve water and allocate the scarce resource efficiently. Water-trading markets could help allocate water to high-valued uses, such as fallowing fields and dwindling trout streams, but California's lengthy and complicated restrictions make it exceedingly difficult to make water trades. Streamlining the approval process for water transfers that have been approved in a previous year or serve environmental ends would promote water conservation and environmental health. (Page 14)

Prescribed Burning Liability Laws: Prescribed burning liability laws determine who is held responsible for damages caused by a prescribed burn. Though these controlled burns enrich soil health, reduce wildfire fuels, and create wildlife habitat, many landowners are reluctant to use them when strict liability laws are in place. Reducing the liability level of prescribed-burn laws, or creating insurance structures that help compensate for damages when a prescribed burn does cause harm, can promote the use of fire as a tool for fostering healthy ecosystems. (Page 18)

Estate Tax: Often referred to as a "death tax," an estate tax is levied on an estate when its owner dies and it is passed down to the heirs. Working lands are often asset rich, but many have little cash flow and must be developed or sold off to pay the estate tax. Though many landowners are able to use careful estate planning to avoid paying the tax, the planning process can be extensive and expensive. Repealing the estate tax would allow landowners to avoid the hassle of estate planning and help keep working lands intact and undeveloped. (Page 20)



The presence of an endangered species such as the red-cockaded woodpecker can greatly restrict the activities permitted on land, whether public or private.

THE ENDANGERED SPECIES ACT

ISSUE

The Endangered Species Act (ESA) was passed in 1973 to protect and recover imperiled species and their habitats. There are currently more than 2,000 plant and animal species listed under the act, and billions of taxpayer dollars are devoted to enforcement efforts related to the act each year.¹

Under the takings clause, in Section 9 of the act, it is illegal to kill, harm, or "take" a listed species.² The law also prohibits private landowners from engaging in activities that could harm or modify an endangered species' habitat without first obtaining a federal permit.

The ESA calls for U.S. Fish and Wildlife Service (USFWS) biologists to prevent landowners from engaging in activities that might harm listed species or their habitats. For instance, the act can restrict a landowner's ability to harvest timber if the timber provides habitat for the endangered red-cockaded woodpecker. Or the act could infringe upon a farmer's ability to divert water from a nearby stream for crop irrigation if the waterway is home to an endangered fish such as the delta smelt.³

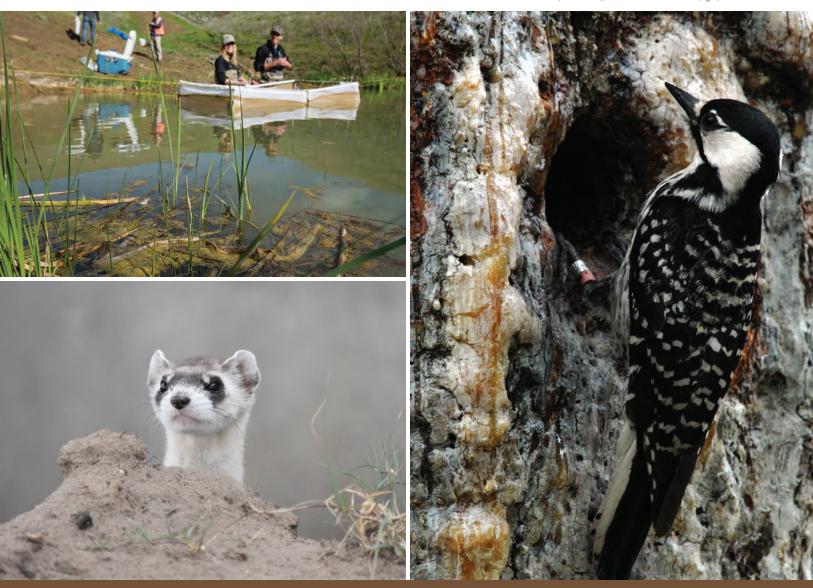
When landowners are forced to give up the use of their land for an endangered species, they personally bear the cost of protecting the species. When a landowner cannot cut his own trees because they are home to red-cockaded woodpeckers, his livelihood is threatened from that loss of potential revenue. Furthermore, the ESA does not require landowners be compensated for income lost due to the act's land-use restrictions. As a result, landowners often see endangered species as liabilities.

The policy, therefore, often causes farmers and ranchers to manage their lands in ways that do not promote endangered species habitat—or may even

actively harm it. For example, to avoid the headaches that can accompany ESA restrictions, North Carolina timber producer Ben Cone undertook efforts decades ago to keep his stands from becoming old-growth pines, which are considered ideal habitat for the endangered red-cockaded woodpecker.⁴ Prior to the discovery of the endangered bird on his property, Cone waited to harvest his timber until the trees were 80 years old, and he cut a 50-acre block of timber every five to 10 years. Once the woodpeckers were discovered on his property, he changed his strategy and began to clear cut 300 to 500 acres of 40-year-old timber every year to prevent the forest from becoming old-growth habitat for the woodpecker. Cone was afraid that if he let the timber grow to the point that it was considered endangered-species habitat, he would no longer be able to harvest and sell his timber.

Other landowners have gone so far as to destroy evidence of an endangered species on their properties—often referred to as "shoot, shovel, and shut up." In these cases, private landowners who are capable of providing critical habitat for imperiled species do not engage in land management practices that are beneficial for such species for fear that land-use restrictions will threaten their freedom to manage their private property.

In response to concerns by landowners that the Endangered Species Act creates these perverse incentives, the U.S. Fish and Wildlife Service devised Safe Harbor Agreements in 1995.⁵ A Safe Harbor Agreement is a voluntary agreement between either the USFWS or the National Oceanic and Atmospheric Administration and property owners whose actions contribute to the recovery of a listed species. Under such an agreement, property owners are assured that if they contribute to the



Threatened California red-legged frogs have found refuge on private lands engaged in conservation banking (top left). Endangered black-footed ferrets were successfully introduced onto Turkey Creek Ranch in Colorado (bottom left). The endangered red-cockaded woodpecker thrives in old-growth pine habitat (right).

recovery of listed species on their property, the USFWS will not require additional restrictions on the property without landowner consent. In short, the agreements maintain the landowners' authority over their land when they make efforts to preserve endangered species.

When the Walker family of Pueblo, Colorado, faced a prairie dog infestation at Turkey Creek Ranch, they hoped to solve the problem by introducing one of the rodent's natural predators onto their proper-

ty: the black-footed ferret. But the ferret is endangered, so introducing it would mean the USFWS could restrict ranch activities that might harm the ferrets. There was a chance the Walkers would have to stop grazing cattle in many areas, which would limit their ability to manage the land as a working cattle ranch.

To address these concerns, the family pursued a Safe Harbor Agreement with the USFWS. Under the agreement, the Walkers cannot purposely kill

the ferrets, but they are protected if the animals are accidentally killed in the day-to-day use of the ranch. This allows the family to continue operating their cattle ranch while still providing a home for the endangered ferrets.

While Safe Harbor Agreements do help address some of the perverse incentives of the Endangered Species Act by providing assurances against accidental takings, landowners are still required to jump through many hoops to enter into one, increasing the transaction costs required to conserve species. While some agreements can be developed within six to nine months, more complex agreements can take much longer.⁶ Landowners must gather general information about their property, and the USFWS then describes the baseline requirements necessary to sustain the species. Using these baselines, the property owner and the USFWS devise land-use objectives, assess habitat quality, and identify other information needed to develop an agreement. Together the landowner and USFWS determine targets for species conservation and establish management approaches for private properties.

Even then, yet another step is needed to formalize agreements: an enhancement of survival permit. Once all the red tape is cleared, the enhancement of survival permit and Safe Harbor Agreement together allow landowners to improve habitat for listed species without incurring additional restrictions. But before the permit can be issued, the application is subject to a 30-day public comment period and an internal review. Even after all the paperwork, while a Safe Harbor Agreement can protect a landowner's management authority, an endangered species is still rarely considered an asset on working lands.

In addition, a Safe Harbor Agreement does not protect neighboring landowners. If an endangered species is reintroduced on a property, the goal is that the species' population will multiply and, subsequently, expand onto neighboring lands. With this expansion comes the potential for the neighboring landowners to have their property subjected to usage restrictions in the name of endangered species conservation. Thus, the cycle of viewing an endangered species as a liability rather than an asset is repeated.⁸

Though the Endangered Species Act is well intentioned, it often pits conservation of endangered species and the activities of working lands against each other—threatening the existence of both.

REFORM

The approval process for Safe Harbor Agree-landowners to enter into agreements rather than adopt a "shoot, shovel, and shut up" approach to endangered species. Requiring a landowner who has already worked with the USFWS to design a Safe Harbor Agreement to return to the agency for an enhancement of survival permit is unnecessary overlap. If the USFWS did a thorough job working with the landowner to create the Safe Harbor Agreement, then a separate application, review, and public comment process should not be necessary. Instead, the USFWS should grant an enhancement of survival permit upon completion of the Safe Harbor Agreement. Streamlining the permitting process would reduce the transaction costs of enacting Safe Harbor Agreements for landowners, making it more appealing for owners of working lands to incorporate species conservation into land management practices.

In addition, when a landowner introduces an endangered species onto his or her property, neighbors should be prioritized for Safe Harbor Agreements, even before the species spreads to their property. If the neighbors are protected from unnecessary risks that come with the presence of an endangered species, they will be more willing to allow the species to spread onto their land. As a result, whole communities could become involved in species conservation rather than potentially undertaking efforts to keep the endangered animals off their properties.

Conservation banking would go a step further, motivating landowners to protect imperiled species. This sort of banking transforms endangered species from liabilities into assets by allowing landowners to profit from conserving species and their habitats. Landowners engaged in conservation banking actively manage their lands to protect endangered species, earning credits based on the amount of habitat they provide and the population of the species on their land, among related factors.9 When developers or other parties harm endangered species or their habitats, they are required to mitigate the harmful effects. This can be achieved by purchasing credits from a conservation bank. However, credits must be purchased within a so-called "designated service area"—a set area within which the bank owner may sell credits. The USFWS determines these areas based on physical and ecological attributes to ensure the credits sold directly offset the harm caused. This method is intended to create a market for species conservation within a service area.

Credit banking creates a market for endangered species conservation, allowing working lands to become valuable and profitable sites for conservation. 10 But the market is limited in effect. Often, the USFWS requires credits be purchased from the conservation bank closest to the mitigation site. Instead of being able to purchase from any conservation bank within a given service area, the USFWS ends up picking the winner in the market. This can dampen landowners' willingness to get involved in conservation banking because they cannot be sure they will even get a



The majority of habitat for the endangered sage grouse is located on private land.

chance to participate in the service area's market. To improve the conservation credit market and promote the protection of endangered species through conservation banking, the sale of conservation credits should be allowed within a predetermined service area. Because buyers would be required to purchase credits within a service area set by the USFWS, the credit would represent habitat extremely similar to the habitat being harmed by the purchaser. Therefore, credits would not need to be purchased from the closest site to ensure uniformity because the whole service area would have already been approved for uniformity.

A service area-wide market would allow more people to benefit from preserving endangered species through conservation banking. Instead of the government selecting winners, buyers and sellers within a service area could freely trade, ensuring all endangered species conservationists could be rewarded for their work by selling credits.

THE CLEAN WATER ACT

ISSUE

lean water is essential for the health of humans, wildlife, and plants. The Clean Water Act of 1972 aimed to restore and maintain the chemical, physical, and biological integrity of the waterways of the United States. The act outlined two priorities: eliminate harmful discharge of pollutants into waterways and improve water quality to make it both fishable and swimmable.

To accomplish these goals, the Clean Water Act authorizes the Environmental Protection Agency (EPA) to regulate activities that may pollute the nation's "navigable waters," also called the "waters of the United States." This definition casts a wide net for bodies of water that the federal government has authority to regulate under the act, including ponds, tributaries, and wetlands. Any action that discharges pollutants into these U.S. waters must be approved by a permit from the EPA.

The Clean Water Act may have been passed with the intention of protecting waterways, but the command-and-control regulations prescribed by it fail to deliver clean water. In some cases, point sources, such as industrial facility pipes that discharge into rivers, operate within EPA-permitted levels, but rivers still end up polluted. In these instances, it's often uncontrolled discharge from non-point sources, such as fertilizers and insecticides from farms, that are the major sources of pollution. But paradoxically, the Clean Water Act can make it difficult for farmers to clean up their operations.¹¹ The act's wide-reaching, inflexible authority and strict permitting requirements create red tape for private conservation. For farmers, ranchers, and timber managers who heavily rely on water, this red tape can dissuade them from undertaking efforts to improve waterway health.

Take the example of wetlands. The government classifies wetlands as waters of the United States if they are adjacent or connected to navigable waters and their tributaries, making them subject to the Clean Water Act. Yet in an ecosystem as expansive as a wetland, it is difficult to know where federal regulatory authority ends and the need for private conservation efforts begin. Wetlands purify water, recharge groundwater, and provide wildlife habitat. By discouraging private conservation on certain wetlands, the Clean Water Act clearly has destructive, if unintended consequences.

The expansion of federal regulatory jurisdiction under the Clean Water Act also threatens to directly dampen private conservation efforts through its permitting requirements. The ban on the discharge of pollutants into waters without a permit includes "clean fill" material, such as dirt. So even the most well-intentioned conservation efforts may need federal permits to undertake ecological restoration on private lands if earth is moved near waterways or if streambeds are involved. For example, a rancher working to restore an irrigation ditch into a meandering trout stream would need to move streambanks and channel the surrounding dirt to achieve his goal. Moving this soil in and around the stream will send some dirt down the waterway, which can be considered a discharge of pollutants. In addition to being costly and time-consuming to acquire a permit for such an activity, failure to comply with these rules can bring criminal penalties.

Oregon farmer Bill Case learned about the need for Clean Water Act permits the hard way. 12 The North Santiam River runs through Case's 170-acre farm, where he grows corn and beans. In 2007, heavy rains eroded his black soil, adding sediment to the river. Case consulted an engineer and was told that





No-till farming can reduce erosion and prevent runoff from reaching waterways (left). Sensors that monitor water quality make it easier to identify and measure pollution (right).

if he did not repair the river banks, he could lose 50 acres of his land in the next flood.

To protect his farm and keep more soil from eroding into the waterway, Case implemented a series of repairs under the guidance of the U.S. Army Corps of Engineers. His major project was building a retaining wall more than 40 feet from the river's edge. But Case failed to get a permit. He now faces potential fines of more than \$100 million for his river-bank repairs made nearly a decade ago.

The EPA is suing Case because his repairs were made below the "ordinary high-water mark" of the river, meaning that the areas on which repairs were made included the "waters of the United States." Case's project, therefore, was technically subject to the permitting requirements of the Clean Water Act. The EPA lawsuit alleges that Case discharged fill materials into U.S. waters

and harmed wetlands alongside the river by discharging rock and dredged material below the high-water mark. Case maintains that his actions prevented greater erosion into the river. Not only has the EPA levied a hefty fine, but it has also ordered Case to tear out his bank repairs and get a permit before rebuilding the wall.

As Case's story demonstrates, the Clean Water Act creates costly regulations for working lands and can even discourage landowners from engaging in land management projects that promote conservation. Obtaining requisite permits can be costly and time-consuming for owners of working lands, which can cause them to abandon projects that would restore environmental resources. In practice, the Clean Water Act often causes working landowners to leave things as they are rather than risk affecting waters of the United States by undertaking projects that would produce public environmental benefits.

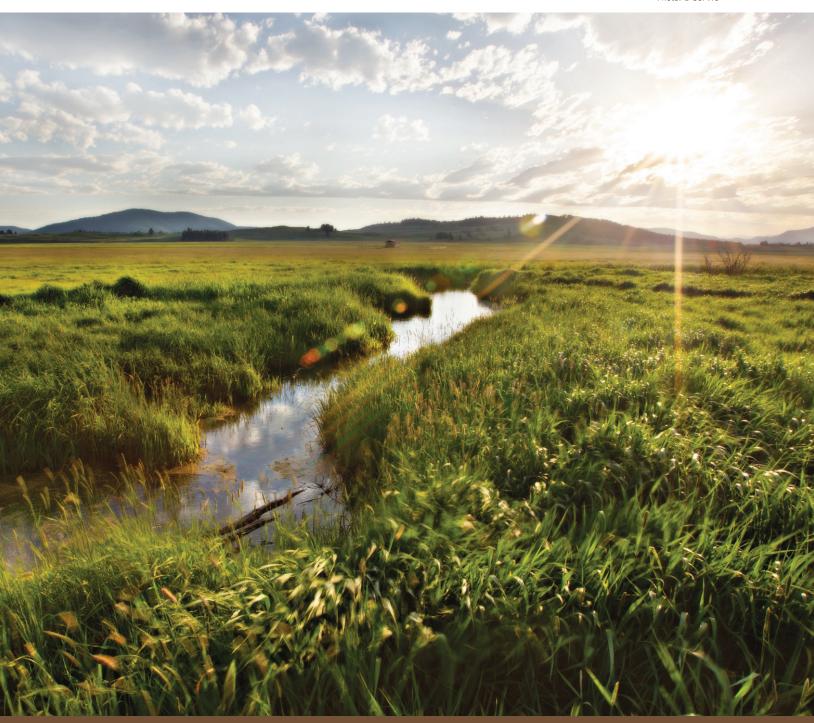
REFORM

R ather than adding more -- and in water quality would reward workingather than adding more regulation, markets lands practices that reduce water pollution and clean up our waterways. Water-quality markets foster environmental stewardship of waterways and reduce pollution by connecting those who can supply clean water with those who demand it. The Environmental Protection Agency establishes standards for clean water and limits the amount of pollution that dischargers can release into water to achieve those standards. Pollution amounts are tracked, and dischargers are required to mitigate any excess damages. Water-quality trading is a marketbased approach that allows permitted dischargers, such as power plants, to offset their pollution by purchasing nutrient-reduction credits from farmers who take steps to improve water quality. Credits are generated when landowners implement conservation practices that reduce soil erosion, runoff, or pollution. Water-quality trading can help keep water clean in a way that benefits landowners, communities, and the greater environment.

Many owners of working lands understand the impacts their actions have on water quality, and they are adopting practices that prevent runoff pollution. With a water-quality market, farmers could generate credits by altering crop harvests, stock rotations, fertilizer applications, and tilling practices, which can release significant amounts of sediment, phosphorus, and nitrogen. Voluntary water-quality trading can reward working landowners for the environmental benefits they create and encourage other landowners to do the same.

Improving practices on working lands can greatly reduce the negative effects of farming, ranching, and timber harvesting on water quality. No-till farming, where crops are grown each year without disturbing the soil through tillage or plowing, improves soil health and reduces erosion and runoff into waterways. In addition, planting cover crops to provide seasonal cover when soil would otherwise be bare significantly reduces erosion. Though these practices have not historically been widely adopted as part and parcel of land management, they are quickly gaining traction for their ability to enhance both harvests and water quality. In addition, when agricultural landowners are able to profit from changing their practices to reduce water pollution, they will be more likely to do so.

Markets can also promote working-lands practices that improve water quality by granting pollution credits that can be bought and sold. However, one of the difficulties in creating a water-quality market is how to determine who is responsible for what pollution and when, and the contributions of individual projects toward water-improvement goals. New innovations in technology to monitor water quality may make it easier and cheaper to track pollution, especially non-point-source pollution. Researchers are currently developing cheap, easyto-use, credit card-sized sensors that can measure chemicals in water. These devices would allow for more frequent testing in more places throughout a waterway, making it easier to identify where pollution comes from.¹³ Advancements in water-quality monitoring technology can help determine when and where quality improvement credits are due, improving markets.



Wetland-restoration projects benefit private landowners as well as the wider environment.

WATER-TRADING RESTRICTIONS

ISSUE

Then it comes to water in the West, drought, population growth, and economic development are just a few of the factors that have contributed to recent shortages. In times of drought, less water is available for plants and wildlife. Once-planted fields have dried up, animals have been left without the shelter and food sources of forage crops and fruit trees, and dry soil blows away for good.

Traditional regulatory solutions, such as water-use restrictions, have not proven to be sustainable approaches to conserve water and allocate the scarce resource efficiently. Markets that allow for water to be traded, however, would reward conservation. By trading water, those who conserve it can receive a financial return for their actions and diversify their income. Fields that otherwise would not have had irrigation can be planted, preventing erosion and leaving more water instream for plants and wildlife. Unfortunately, many government regulations restrict water trading and impede the process to sell the resource. As a result, farmers have very little incentive to conserve water, and water cannot be allocated to its highest-valued uses, whether irrigating fallow fields, filling dry trout streams, or any other purpose.

California is a prime example of this predicament.¹⁴ Agriculture accounts for nearly half of all water use in the state, which recently suffered five years of severe drought.¹⁵ With low water levels, California's \$50 billion agricultural industry suffers as croplands go fallow. In January 2014, Governor Jerry Brown declared a drought state of emergency. He directed state officials to assist farmers and communities affected by the dry conditions, directed state agencies to use less water and hire more firefighters, and initiated a water conservation public awareness

campaign. When the drought persisted into 2015, Governor Brown issued an executive order that forced cities and towns to reduce their water consumption by 25 percent.¹⁶

Some water districts had already decided to take matters into their own hands to conserve water and ensure their crops could flourish. In 2012, the South San Joaquin Irrigation District in the Central Valley modernized its irrigation system, transforming it from a gravity system into a pressurized one that uses moisture-sensing technology to ensure the optimal amount of water is delivered to crops. Since then, farmers connected to the pressurized irrigation system have grown 30 percent more crops with 30 percent less water, leaving more water available for other farmers and wildlife.

To finance additional infrastructure projects that could conserve water, the irrigation district now wants to lease its surplus water to districts downstream that currently face shortages. The South San Joaquin district would then be able to use the profits to convert the rest of its system from gravity to pressurized. But its efforts have so far been stymied by water-trading regulations in California that make it difficult and costly for interested parties to buy and sell water rights.

An incredible amount of time and money have to be spent navigating government regulations before water can actually change hands in California. For example, a single, simple lease by Scott River Water Trust—an organization that sought to lease water from farmers and leave it instream for fish—took two years and \$30,000 to obtain.¹⁷

The authority to approve any change to a water right, including those related to a water lease or



Restrictions on trading water can make it difficult to transfer the resource from one use to another, even when such trades would result in more efficient water use and improved environmental outcomes.

purchase, rests with the State Water Resources Control Board. To trade water, a California water rights holder is required to file a notice of intent with the board. The notice must include the specifics of the transfer, including a description of the environmental conditions that will protect fish and wildlife and an agreement that specifies how environmental protection requirements will be accomplished for the duration of the lease. The party applying for a water-trade permit is subject to a 30-day public notice period, a 45-day administrative review period, and depending on the duration of the proposed transfer, a months- or years-long environmental review. In addition, it is up to the permit applicant to prove that the proposed transfer will not damage another water user or the environment. The lengthy approval process can undermine the original motivation for the transfer if the water lessor or purchaser's demand is seasonal or short-term. In some cases, the process can add such significant costs to water trading that the benefits of a transfer may be completely nullified.

After all the requisite steps, if the transfer is approved, the two parties still have sufficient water reserves to trade, and both are still interested in

trading, the State Water Board monitors the lease to ensure it does not "unreasonably" affect fish, wildlife, or other beneficial instream uses. This means that even after a trade arrangement has been reached, the water board can step in and restrict a trade if they deem it harmful to other instream uses—creating a great deal of uncertainty and making parties more reluctant to enter into agreements.

The approval process for water trading is so complex that the South San Joaquin Irrigation District has not yet found a cost-effective trade arrangement for its surplus water. While all the requirements placed on parties interested in leasing water aim to ensure that transfers do not impose costs on the environment or other water users, they can often prevent—or at least significantly raise the cost of mutually beneficial exchanges that would lead to more efficient water use and improved environmental outcomes. Rather than create excessive red tape, government policies should instead open the door for more water conservation through markets.

REFORM

straightforward way to promote water conservation in California would be to streamline the administrative review of transfers that have been previously approved by the Water Board and implemented without adverse impacts to other water users or the environment. An expedited review process for short-term transfers for environmental purposes would also help lighten the unnecessarily burdensome review procedures. Previously approved transfers have already gone through extensive review by experts during their initial applications to the agency, so a full-length review is unnecessary. Furthermore, because any substantive issues with a water transfer would likely have surfaced during the board's initial review, shortening the public comment and objection period to 15 days would reduce unnecessary delays. If no comments are received, the Water Board's review period could be shortened from 45 days to 7 days; if there are public comments, the period could still reasonably be cut to 15 days.

In addition, in cases of transfers previously approved by the Water Board, the burden of proof should be shifted to the party claiming injury. The first time a transfer is reviewed, the applicant has to bear the burden of proving that a project will not harm any other water user or the environment. If the same conditions apply for the transfer's renewal, it should fall on the objector to prove how the transfer might adversely affect a water user or environmental resource.

Short-term water transfers that preserve or enhance wetland habitat, fish and wildlife resources, or recreation should also have a streamlined approval process. Environmental water transfers are usually aimed at getting more water in a certain stream area during a very specific time frame. If a transfer aimed at preserving the environment is bogged

down in review criteria or appeals processes, the fish and wildlife that depend on that potential water transfer will suffer. Provisional approval while the transfer is reviewed, particularly if fish and wildlife agencies testify to the natural resource need, would keep streams wet after a brief initial review that determines the transfer would cause no injury to other users.

These reviews of transfers for environmental outcomes should also distinguish between small inbasin transfers and large out-of-basin transfers and be evaluated accordingly. If a project proposes to move a large amount of water into a completely different basin, it will likely have a more complex impact—and need a more intensive review—than a small project that only moves water within a single watershed. One approach to differentiating review criteria would be to set a threshold on the amount of water or number of basins involved. For example, if a project would transfer more than 100 acre-feet of water or transfer water out of a basin, then it could qualify for a more rigorous review.

Similar to the proposal for previously reviewed transfers, in instances of water transfers that preserve or enhance environmental factors, the burden of evidence should be shifted from the party seeking the water transfer to the party claiming liability. Fish, wildlife, and other natural resources are owned by the State of California and are held in trust for the benefit of residents. The burden of evidence during the appeals process should be shifted to the parties that object to the improvement of communal environmental resources.

Contracts such as water sales and leases that move water rights between lower- and higher-value uses are crucial tools for reallocating scarce water to the places it is most needed. In some areas, these reforms might be the sole remedy that can keep crops healthy and protect fish from dwindling stream flows.



Streamlining the approval process for water transfers that serve environmental ends, such as a lease that leaves water instream for salmon during dry periods, would promote conservation.

PRESCRIBED BURNING LAWS

ISSUE

Prescribed burning is a technique that has been used by land managers for centuries. During a prescribed burn, a carefully monitored fire is intentionally set for resource-management purposes. Fire is a natural part of both forest and grassland ecology, and prescribed burns can halt encroachment of non-native species, enrich soil, provide better forage for wildlife, and prevent catastrophic wildfires by reducing the accumulation of fuels. These burns can be a cost-effective tool for restoring and managing forests, croplands, and rangelands.

Despite fire's many benefits for working lands and the environment, landowners are often reluctant to conduct prescribed burns. Fires, of course, can grow out of control and damage neighboring properties—possibly making landowners who use prescribed burns liable for such damages. Liability rules governing prescribed burns are regulated by state law, and states apply one of three liability standards to lawsuits involving prescribed burns: strict liability, simple negligence, or gross negligence. Strict liability holds burners liable for any property damage caused by an escaped burn, regardless of the action of the burner. Simple negligence requires the plaintiff to show the burner did not practice reasonable care and was negligent, which would allow the plaintiff to collect damages in a lawsuit. Gross negligence is the most lenient standard; it holds that, assuming the burner followed outlined regulations, the plaintiff must show reckless disregard by the burner.

Liability standards play a role in determining the risk incurred by a landowner who sets a prescribed burn on his or her land. Even if a burn plan is followed and a landowner responsibly manages a fire, there is always a chance that a fire can grow out of control and damage a neighbor's property. Research has found that private landowners are more likely to use prescribed fire to manage their properties and burn a greater portion of their lands—both of which improve environmental quality—when there are gross negligence standards as opposed to strict-liability or simple-negligence ones.¹⁸

Yet only four states have gross negligence standards for prescribed burning, meaning that in nearly all states, working landowners are less likely to use environmentally beneficial prescribed burns because of the enormous liability risk if something goes wrong. Policies that increase liabilities for burners decrease prescribed burning—and the environmental benefits that come with it.

REFORM

One approach to encourage wider use of prescribed burns on working lands is to amend liability laws to gross negligence. In cases of damage, this standard places the burden on a plaintiff to show reckless disregard by a burner so long as the burner followed outlined burn regulations. Lowering liability restrictions in the 46 states that do not have gross negligence standards would significantly increase the use of prescribed burning.

Though prescribed burning can be beneficial for the environment, less stringent liability laws increase fire risks for neighboring properties. Gross negligence standards can make it more difficult for a plaintiff to be compensated for damages by a burner. While such trade-offs must be carefully weighed, the status quo of strict liability and simple negligence policies, followed by virtually all states,





Prescribed burning (left) can reduce fuel accumulation and encourage new growth to take root (right).

results in exceedingly little prescribed burning. The consequence is foregoing a great deal of environmental good that could be done by using prescribed fire on private woodlands, farms, and ranches across the country.

One way to promote prescribed burning while mitigating potential damages to neighboring properties is to use prescribed burn insurance. A home, farm, or ranch insurance policy does not cover damage a policyholder causes to other property. By sharing best management practices and pooling risk across the state, prescribed burn insurance can help landowners reduce fire hazards.

In Oklahoma, the Samuel Roberts Noble Foundation, the Oklahoma Prescribed Burn Association, and the Bramlett Agency worked together to address prescribed burn liability. The Bramlett Agency now offers prescribed burn insurance, a property and casualty liability program. The policy protects landowners or lessees implementing prescribed fire

against claims for any damage on someone else's property, providing up to \$1 million in general liability coverage. A policy costs \$500 a year and covers two prescribed burns, but coverage for additional burns can be purchased for \$250 per burn. To be eligible for a policy, landowners must follow all legal statutes and ordinances, adhere to set prescribed burn requirements, and develop and adhere to a prescribed burn plan.

Research has shown that the fear of being held liable for damages caused by an escaped burn limits landowners' use of fire as a land management tool.²⁰ To encourage the use of prescribed burning to boost pasture productivity, improve wildlife habitat, and stimulate new plant growth, it is important to reduce the economic risk for landowners. Prescribed burn insurance reduces risk while still ensuring damages are covered.

ESTATE TAX

ISSUE

A nother financial threat to the security of working lands is the estate tax. Often referred to as a "death tax," an estate tax is levied on an estate when its owner dies and it is passed down to heirs. The effect of this tax can be substantial for working lands, with the top tax rate reaching as high as 40 percent.

The tax currently applies to estates valued at more than \$5.45 million. While that may sound like a lot, once the value of land, livestock, equipment, and other assets needed to run a farm, ranch, or timber operation are considered, it is not uncommon for many working landowners to reach that limit. After all, a single tractor can easily cost six figures, and that does not even begin to get into the value of land and buildings.²¹

Urban sprawl is also pushing up working-land prices in many parts of the United States, making them more susceptible to reaching the estate-tax threshold.²² As populations increase and incomes grow, more people are looking to buy agricultural lands for urban expansion or second homes. This demand has driven up the values of working lands near towns and cities. A recent report from the Texas A&M Institute of Renewable Natural Resources found that the average appraised market value of working lands in the state increased more than 35 percent between 2007 and 2012.²³ The average land value for the 25 fastest-growing counties in Texas was \$5,266 per acre in 2012, compared to the statewide average of \$1,573 per acre, demonstrating just how much population growth can increase land values.24

Although operations on working lands may be rich in assets, they generally have little cash flow. Often, farmers, ranchers, and timber harvesters

rely on a few major harvests or sales per year for their incomes. Recent increases in land values put working landowners at risk of having to pay estate taxes, but limited cash flows can make it difficult for producers to pay the taxes outright.²⁵ As a result, many properties are often either developed or sold after the owner's death.²⁶

Careful estate planning can be arranged to avoid paying estate taxes, but it is a complex, time-consuming, and expensive process. Estate-planning options that can mitigate taxes generally include a combination of conservation easements, a family limited partnership, and life insurance policies structured to help pay the tax. With conservation easements, heirs can exclude 40 percent of the value of the land in easements from estate tax.²⁷ A family limited partnership allows the value of an owner's assets to be reduced by transferring the value to the next generation over many years so that the estate tax can either be reduced or avoided altogether. In addition, life insurance policies can be arranged so that cash will be provided to pay estate taxes after death. But negotiating any of these approaches takes significant time and expense, and they can diminish a landowner's use of and authority over his or her land while still alive.²⁸

Rancher Diane Holly knows the pressures of skyrocketing land prices and the headache of estate planning all too well. Holly's 1,800-acre ranch was originally homesteaded in 1886 and passed down through generations. Located near the popular vacation town of Steamboat Springs, Colorado, the ranch's value has exploded as more people look to develop the area for vacation homes. When Holly's mother died in 1983, the ranch was appraised at \$800,000. Nine years later, the value was up to \$1.2 million, and her father was turning down







Estate taxes threaten the continued functioning of working lands for future generations (left). Working lands often have little cash flow, and many properties are either developed or sold after an owner's death (top right). Urban expansion is pushing up prices of working lands, making them more susceptible to reaching the estate-tax threshold (bottom right).

offers from out-of-towners who wanted a private hunting ranch because he wanted to keep the land in agriculture and was confident he had a good estate plan. Unfortunately, Holly's father died in 1997, and the ranch was valued at \$2.3 million subject to the estate tax requirements of the time and his estate plan was not enough to cover the tax liabilities. She had nine months to pay \$400,000 in estate taxes, and the ranch only brought in \$28,000 per year. To cover the tax, she had to sell 200 acres of river bottom.

Though the estate tax limits have since increased to \$5.45 million, Holly estimated that the land was worth \$22 million in 2008, and that it has only continued to increase since then—making it susceptible to estate tax.²⁹ After already having to pay estate tax once to keep the ranch in the family, Holly has actively engaged in estate planning, but she's reluctant to put a conservation easement on the property because she is afraid it would be too restrictive on her heirs' use of the land. In the end, Holly is frustrated by an estate planning process that is constantly playing catch-up with the real estate market.

Estate taxes threaten the continued functioning of many working lands. The need to raise cash to pay the tax often means that working lands become fragmented or developed, threatening the environmental benefits that come with large tracts of lands.

REFORM

R epealing the estate tax would not only free landowners from paying the tax but also from the laborious and complicated planning that many go through to avoid the tax. For owners of working lands who have limited cash flows and ancestral roots in their properties, this is a lot to ask. These owners are stuck between a rock and a hard place: either pay the estate tax or give up cash and control in estate planning. Repealing the tax would allow farmers, ranchers, and timberland owners to focus on keeping their operations in business and in the family, rather than spending countless hours and dollars in estate planning.

In fact, abolishing the estate tax would protect working lands with relatively little foregone federal revenue. Due largely to careful estate

planning—which eats up resources that could be put to productive uses adding value elsewhere only 0.18 percent of estates had to pay the estate tax in 2013.30 In 2014, revenue from the tax made up less than 0.60 percent of the total federal revenue of over \$3 trillion.31

Abolishing the estate tax would not significantly reduce federal revenue. It would, however, allow owners of working lands to stop spending valuable resources paying the hidden costs of avoiding the tax. They could also stop fearing that their land will be sold or developed if subject to the tax. By getting rid of the estate tax, owners of farms, ranches, and timberlands could preserve their undeveloped spaces that provide valuable wildlife habitat, clean water, and other environmental benefits.



Owners of working lands who have limited cash flows and ancestral roots in their properties are stuck between a rock and a hard place: either pay the estate tax or give up cash and control in estate planning.

CONCLUSION

wners of working lands have proven willing and able to conserve valuable environmental resources. However, several federal and state policies, no matter how well-intentioned, too often interfere with promoting and achieving conservation on working lands.

Many regulations and policies get the incentives on working lands wrong. In practice, they increase the costs of engaging in conservation. In some cases, policies meant to protect environmental resources restrict landowners' authority if they attempt to engage in conservation efforts, increasing the personal costs borne by the landowners. In addition to these many costs, owners of working lands also have to worry about planning for and paying estate taxes.

Working lands and the conservation benefits that flow from them are under threat. In order to protect these lands and promote private conservation efforts on them, it is imperative that policies for environmental protection be reformed to reduce red tape and uphold landowner authority.

Endnotes

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