

ADA SOIL & WATER CONSERVATION DISTRICT

9173 W. Barnes Drive, Ste. C

Boise, ID 83709



FIVE-YEAR RESOURCE CONSERVATION

BUSINESS PLAN

JANUARY 1, 2022 – DECEMBER 31, 2026

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Conservation Districts Background

Idaho's conservation districts were organized as part of a national soil conservation movement in response to the Dust Bowl era of the 1930s. The Ada Soil & Water Conservation District (Ada SWCD) originally formed as the Dry Creek Soil Conservation District on April 30, 1948. Conservation districts are governmental subdivisions of the state of Idaho whose leadership comes from locally elected volunteer supervisors. The 50 Soil Conservation Districts in Idaho, including the Ada Soil & Water Conservation District, are authorized by Idaho state law under Title 22, Chapter 27. Under 22-2722 titled "Powers of Districts and Supervisors," it states that, "A soil conservation district organized under the provisions of this chapter shall constitute a governmental subdivision of this state, and a public body corporate and politic, exercising public powers..." Conservation districts are not state agencies, but rather locally governed bodies that receive some technical and financial assistance from the state.

Support and guidance to Idaho's conservation districts is provided by the Idaho Soil & Water Conservation Commission (ISWCC.) Among the contributions and responsibilities of conservation districts, Idaho law states that "... conservation districts and the state soil conservation commission lead non-regulatory efforts to conserve, sustain, improve and enhance Idaho's private and state lands and provide assistance to private landowners and land users to plan, develop and implement conservation plans addressing soil, water, air, plant and animal resources."

Conservation district are catalysts for coordinating and implementing natural resource conservation programs and channeling expertise and assistance from all levels of government into action at the local level. Idaho conservation districts emphasize a non-regulatory, incentive-based approach to achieve local support and successful project implementation. The methods used for implementation rely heavily on proven science-based solutions and typically integrate informational and educational components.

In addition to the support provided by the ISWCC at the state level, Idaho's conservation districts also have a unique agreement at the federal level with the USDA Natural Resources Conservation Service (NRCS). As a partner to local conservation districts, USDA-NRCS provides technical assistance to landowners and land users as needed or requested within conservation district boundaries. Each district in Idaho has a signed Mutual Agreement with the Secretary of Agriculture and the Governor of Idaho that establishes a framework for cooperation that ensures appropriate project leadership at the local level, although support and assistance may originate at the state or federal level.

Ada SWCD History

Following World War II, Ted Downing of Eagle became concerned about flooding of the fertile farmland along Dry Creek in northern Ada County. Soil erosion from the farm fields and stream banks within the Dry Creek watershed above Eagle was contributing to the problem. Downing and others in the communities of Eagle and Star were successful in their petition to form the Dry Creek Soil Conservation District to address the erosion control and flooding issues in the Dry Creek watershed.

Since its creation in 1948, the name and boundaries of the district have changed several times to become what is now known as the Ada Soil & Water Conservation District. Although the original district included only 118,000 acres, several separate requests for annexation have been granted over the years to bring the total acreage to 699,524. The current district boundary coincides with the boundary of Ada County, but also includes a portion of Boise County that was part of the original Dry Creek Soil Conservation District (Figure 1).

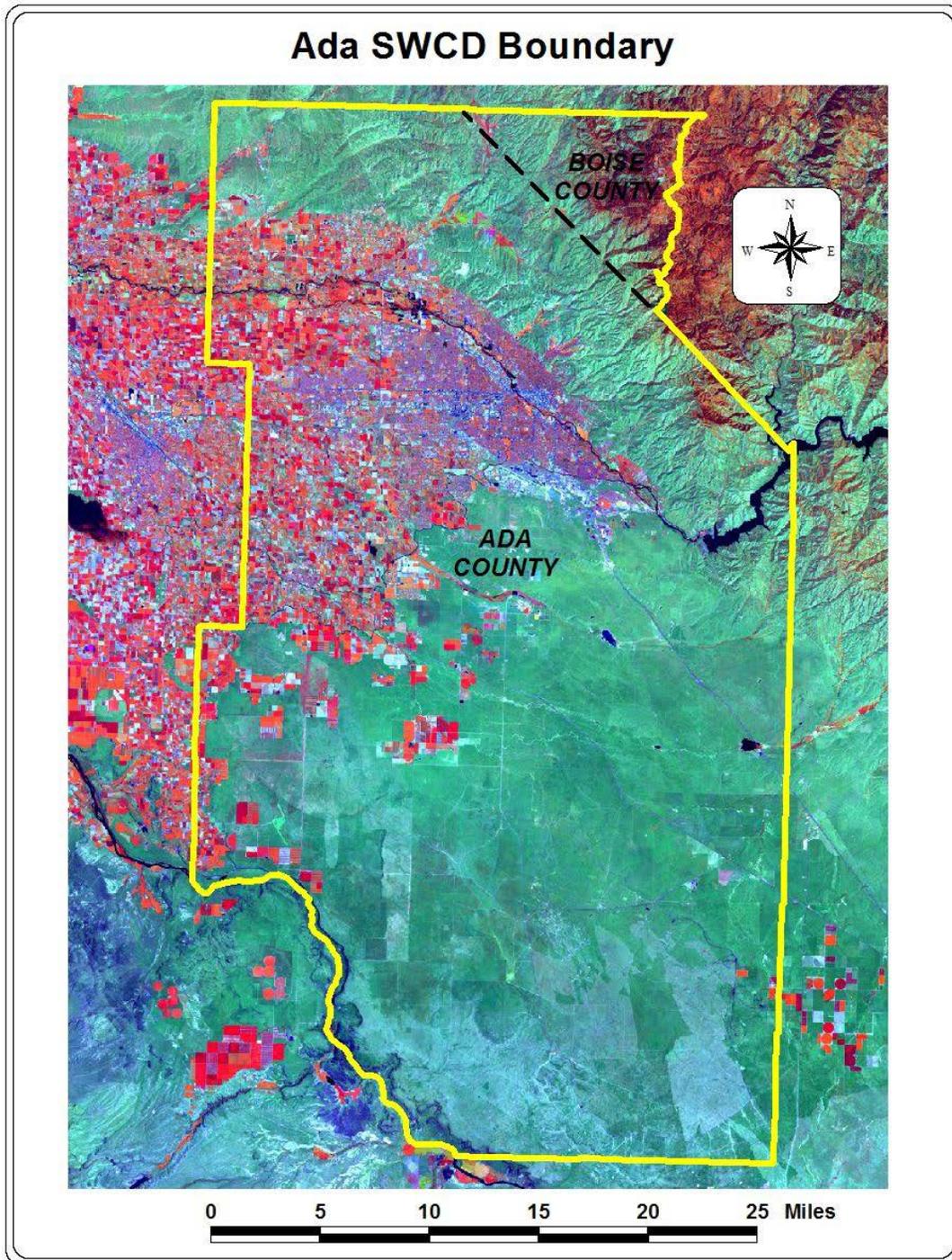


Figure 1. Current Ada SWCD Boundary

Executive Summary

In addition to the existing partnerships with federal and state agencies, the Ada SWCD has worked diligently to establish a cooperative working relationship with Ada County officials, committees, and staff. As a result, some of the objectives, goals and implementation actions within this plan closely reflect the strategies previously identified by Ada County (particularly those pertaining to land use, natural resources, public services, and recreation). Although we are happy to have achieved over 70 years of successful conservation implementation, we are fully engaged in meeting present day conservation needs while building toward the future. We continue to work cooperatively with area farmers and ranchers, yet we've also adapted and evolved to work actively within the urban and suburban areas of our district.

This plan was developed not only to guide the Ada Soil & Water Conservation District during implementation, but also to encourage cooperation among landowners, government agencies, private organizations, elected officials, and other community groups. This document identifies resource conditions and trends, expresses appropriate goals, and provides strategies for implementation actions within the boundaries of the Ada Soil & Water Conservation District.

Mission, Vision, and Values

Traditionally, the Ada SWCD's primary conservation partners have been farm and ranch operators. Over the past decade, however, our customer base has expanded and evolved with the shifting landscape of Ada County. The Ada SWCD has chosen to evolve and adapt to meet natural resource needs of a rapidly growing Ada County. We are continually pursuing and developing new partnerships with other groups and organizations interested in promoting the wise use, conservation, and enhancement of natural resources in Ada County. Although we continue to work cooperatively with private landowners, we recognize the need to more effectively partner with federal, state, county, city, and local governments and jurisdictions responsible for natural resource management.

The vision for the Ada Soil & Water Conservation District is to be the leader of natural resource planning, conservation, and implementation activities in Ada County. In pursuing this vision, we continue to rely on some of the core values that have contributed to over 70 years of conservation success. We value the rights and responsibilities of private property owners and their ability to make informed natural resource conservation decisions on their own land. We value partnership and cooperation in the pursuit of natural resource conservation objectives. We value voluntary, non-regulatory efforts to accomplish natural resource conservation objectives. We value locally led, grassroots implementation of conservation practices on the ground. We value the wise use of all natural resources. Additionally, we value honesty, integrity, open communication, professionalism, and fiscal responsibility.

Ada SWCD Organizational Structure and Staff

The Ada Soil & Water Conservation District board consists of seven locally elected members representing a wide variety of professional and personal backgrounds. They are dedicated volunteers serving citizens and initiating projects to address the natural resource conservation needs within their district. The Ada SWCD Board is committed to promoting the wise use and enhancement of all natural resources and providing conservation education for Ada County residents. Currently, the

Ada SWCD employs one part-time District Manager, one part-time Program Coordinator, and one part-time Office Administrator. In 2022, Ada SWCD will hire one part-time Soil Education & Outreach Coordinator. The staff is provided office space by the USDA-NRCS in the Boise Field Office. The Board members, staff, and interested conservation partners meet regularly on the first Friday of each month. In addition to handling the business of the Board and its budget, board meetings are held to discuss natural resource issues and priorities within the District and to identify new opportunities for conservation partnership.

Although funding for the operation of Ada SWCD activities originates from a variety of sources including project grants and partnerships, the two primary sources of financial support as dictated in state law are Ada County and the State of Idaho via the Idaho Soil and Water Conservation Commission (ISWCC.) Each of the 50 Conservation Districts in Idaho receives a base allocation from the ISWCC. Each District then makes an annual request for additional funding from the ISWCC that corresponds with the contribution from the County Commissions they serve. The request for funding to the ISWCC from the Ada SWCD, as well as all other Districts, can be no more than twice the amount received from their county (I.C., sec. 22-2727.)

As needed to fulfill the goals and objectives outlined in this plan, the Ada SWCD will continue to pursue additional grant opportunities, partnerships, and cooperative working agreements with local, city, state, federal, and private cooperators to coordinate technical assistance and hire employees as appropriate.

Cooperating Conservation Partners, Agencies, and Organizations

Partnerships are critical to the successful implementation of natural resource conservation projects within the Ada Soil & Water Conservation District. Included here are some of the conservation partners and key decision makers we will be working with to accomplish our conservation goals and objectives.

Federal Partners

- USDA – Natural Resources Conservation Service
- USDA – Agricultural Research Service
- US Fish & Wildlife Service
- US Forest Service
- US Bureau of Reclamation
- USDOJ – Bureau of Land Management
- US Army Corps of Engineers

State Partners

- Idaho Soil and Water Conservation Commission
- Idaho State Department of Agriculture
- Idaho State Legislators
- Idaho Department of Environmental Quality
- Idaho Department of Fish & Game
- Idaho Department of Lands
- Idaho Department of Water Resources
- Idaho State Department of Parks & Recreation

County Partners

- Ada County Commission
- Ada County Highway District

- Ada County Parks and Waterways

Incorporated City Partners

- Boise
- Meridian
- Eagle
- Kuna
- Garden City
- Star

Other Partners

- Private Landowners and Operators
- Planned Communities
- National Association of Conservation Districts (NACD)
- Idaho Association of Soil Conservation Districts (IASCD)
- Southwest Idaho Resource Conservation & Development Council
- Irrigation Districts
- Boise School District
- Meridian School District
- Kuna School District
- Lower Boise River Watershed Council
- Boise River Flood Control District #10
- Ridge to Rivers
- Community Planning Association of Southwest Idaho (COMPASS)
- Boise State University
- University of Idaho – Ada County Extension Service
- Land Trust of the Treasure Valley
- Boise Co-op
- Foothills Learning Center
- Republic Services
- Boise WaterShed
- Treasure Valley Food Coalition
- Idaho Botanical Gardens
- Global Gardens
- College of Idaho Environmental Education
- Northwest Center for Alternatives to Pesticides (NCAP)

Ada County Physical Characteristics

General Description of Topography, Hydrology, and Natural Resources

Ada County is home to a wide variety of natural and scenic resources including foothills, mountains, prairies, buttes, canyons, rivers, creeks, and prime agricultural land. In the northern portion of the county, the primary physical features are the Boise Front and the Boise Foothills. The Front is part of the mountainous Northern Rockies and is characterized by steep slopes and relatively high elevations. The Front and the Foothills provide a significant visual backdrop to the valley landscape and include excellent wildlife habitat for big game and other species, several smaller creeks and drainages, a patchwork of private and public land, and a wide variety of recreational opportunities. Preservation and conservation of open space in the foothills to help maintain the critical habitat, visual landscape, and important watersheds has become a priority of Ada County residents and local governments.

While the foothills provide the backdrop, the county is truly defined by the primary water resource in the Treasure Valley: the Boise River. From Lucky Peak Reservoir in the northeastern portion of Ada County, the Boise River makes its way east to west across the county through cities, parks, and farmlands before heading downstream into Canyon County and its ultimate confluence with the

Snake River 64 miles downstream from the reservoir at Lucky Peak. The river and its riparian corridor provide excellent habitat for aquatic, terrestrial species, and avian species in addition to being labeled the “Jewel of the Treasure Valley” for its wealth of public access, parks, trails, and other recreational opportunities. The Boise River has a low to moderate gradient through Ada County and includes three major alluvial terraces.

The Boise River is a major source of drinking water for Ada County residents. It also provides the primary source of water for agricultural production in Ada County via an intricate system of diversions, canals, laterals, and return tributaries to the river. Most of the population in Ada County resides in the relatively small portion of land that falls within the various diversions from the Boise River.

Prior to irrigation development using Boise River water during the 1900s, the large shallow aquifer under the Treasure Valley did not exist. This aquifer (< 200 feet) is recharged annually by surface irrigation and earthen canals that recharge the artificial and natural drains throughout the year. Without the irrigation delivery system, most shallow wells in Ada County would not exist.

The majority of the land area in Ada County consists of the non-irrigated rangeland in the southern two-thirds of the county that extends to the county boundary on the Snake River. This area is characterized by flatter lowlands with few ephemeral waterways and sagebrush desert. The landscape consists of an extensive lava plain scattered with basalt domes and cinder cones. Although the human population is scarce in this southern portion, the Morley Nelson Snake River Birds of Prey National Conservation Area south of Kuna is home to one of the world’s densest concentrations of nesting birds of prey.

Climate

Ada County has a four-season climate with generally mild temperatures. Average daily temperatures during the summer months are around 70°F with average highs reaching the low 90°s during July and August. Average daily temperatures during the winter are just below freezing with average winter highs just above freezing temperatures. On average, the weather station in Boise receives just over 12 inches of precipitation annually, including 20 inches of snowfall per year. The maximum amount of snow fall on the ground in the valley at any one time rarely exceeds 4-6 inches. Precipitation is heaviest during the winter and spring, while summers are typically characterized by dry, hot weather. Growing season for most agricultural crops is late April through early October.

Soils

The USDA-Natural Resources Conservation Service published a soil survey report for Ada County in 1980, and a separate survey was completed for the Boise Foothills area in 1990. According to the soil surveys, there are eleven distinct types of soil found in Ada County. These include the medium to fine-textured soils on the alluvial bottoms and lowlands near the Boise River corridor, as well as the medium to moderately coarse textured soils on the alluvial terraces above the Boise River. These two soil types underlay the majority of agricultural activities, as well as the urban and suburban developments within Ada County. The southern portion of the county has medium loess-

like soils over Snake River basalt. The composition of these soils is mainly coarse sand and gravel which are relatively porous and permeable.

Agriculture

With the wide-scale subdivision of agricultural land to accommodate rapid population growth, many acres of prime farmland have been lost to development. The remaining farmland is also threatened. According to a study conducted by Boise State University, 200,000 acres of farm and ranch land in the Treasure Valley will disappear by 2100. Prime farmland, according to the US Department of Agriculture, includes land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and dependable water supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management.

Due to the extensive irrigation infrastructure managed by local irrigation districts to utilize surface water from the Boise River, a wide variety of crops can be produced in Ada County. Agricultural products include sugar beets, dry beans, silage corn, sweet corn, potatoes, alfalfa, small grains, wheat, onions, mint, sod, and several seed crops. Additionally, there are also dairy, feedlot, and rangeland livestock operations scattered throughout the county along with smaller animal operations including hogs, pigs, sheep, goats, horses, and others.

Unfortunately, some of the same conditions which make the prime farmlands in Ada County so perfect for agriculture also make them ideal for conversion to urban and suburban uses. While much of the prime farmlands and many agricultural acres in general have already been converted to other land uses, it is a priority of the Ada Soil & Water Conservation District to continue serving the natural resource conservation needs of the current agricultural community and to work with local partners to preserve agricultural land.

Forests

Forests contribute to recreational and aesthetic values, enhance the appearance of developed areas, provide shade and valuable wildlife habitat, reduce soil erosion, clean the air, and help preserve valuable watersheds. Within Ada County there are three general forest types: 1) mixed coniferous and deciduous forests primarily found in the upper reaches of the foothills, 2) riparian forests adjacent to rivers, creeks, streams, draws, and wet gulches throughout the county, and 3) urban forests in and around the cities and other developed areas of the landscape.

Wetlands

There are several natural and constructed wetlands throughout Ada County that provide important functions through wildlife habitat, flood water storage, water quality enhancement, and open space preservation. The majority of the wetlands occur in close proximity to the Boise River and its associated tributaries.

Rangeland

Southern Ada County is a majority of the rangeland, often used for grazing and recreation. Most of the land is managed by the BLM and contains sagebrush and natural forbs. There are also noxious weeds such as cheat grass and medusa head that put the area at risk for wildfire.

Land Use and Land Ownership

Land Use

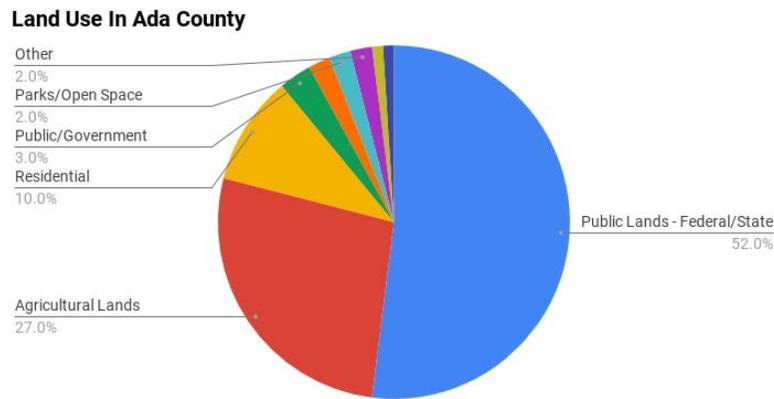
Land use categories recognized in the Ada County 2025 Comprehensive Plan include the following descriptions:

- **Public Lands** – Public lands account for roughly 52% of the County’s total area. Most public lands are found in the southern portion of Ada County, in the Snake River Birds of Prey National Conservation Area, and in the foothills to the east of Boise.
- **Agricultural** – Agricultural lands (though not necessarily active) are the next most common land use in the County, accounting for 27% of the total area. Once a dominant use of the land in Ada County, agricultural lands have been gradually replaced with suburban and urban development.
- **Other Land Uses** – Residential land uses account for approximately 10% of land use in the County. Commercial, retail and office uses and industrial uses account for a little less than 3% of all land uses in the County.

Table 1. Ada County Comparative Land Use Inventory*

Use Category	Percent
Residential	10%
Commercial, Office and Retail	2%
Industrial	1%
Agriculture	27%
Parks/Open Space	2%
Public/Government	3%
Public Lands Federal	45%
Public Lands State	7%
Vacant	1%
Other	2%
TOTAL	100.0%

**In the comparative land use inventory completed by Ada County in the Comprehensive Plan, the acreage totals for each category are estimated with the disclaimer that the total does not reflect all land in Ada County (Table 1).*



Land Ownership

Land ownership in Ada County consists of a patchwork of public and private ownership, with a significant amount of land in the northeastern foothills and the southern flatlands owned by state and federal agencies. Following is a summary of land ownership by major category:

- **Private** – Approximately 48% of land in the county is owned by private individuals or companies. Much of this land is located within city limits and projected areas of impact.
- **City** – A relatively small percentage of land (1.5%) is actually owned by the six incorporated cities within Ada County, although the cities are responsible for developing codes and guidelines that dictate how the land within their city is ultimately developed. Most city owned land consists of city facilities such as city halls, parks, sewer treatment and other public facilities.
- **County** – The County itself owns only about 0.6% of all land within Ada County that consists primarily of park and recreation facilities, and the Ada County Landfill at Hidden Hollow.
- **Other Local Service Providers** – Water, sewer, irrigation, fire, school and other special districts collectively own less than 1% of land in Ada County.
- **State** – The Idaho Department of Lands (IDL), Department of Fish & Game (IDF&G), Department of Corrections, and other state agencies have substantial land holdings totaling 48,173 acres, or 7.1% of all land within Ada County. The IDL parcels consist primarily of land in trust for the state’s common school fund and are managed for a variety of uses. The IDF&G land is managed primarily for the protection of critical wildlife habitat for mule deer and rocky mountain elk.
- **Federal** – Several federal agencies including the Bureau of Land Management, Army Corps of Engineers, US Forest Service, and US Fish & Wildlife Service own a significant portion of all land in Ada County. In total, the federal government owns 292,813 acres, or 43.2% of all land within the county. The BLM is the largest federal landowner with 292,399 acres that it manages for a mix of grazing, recreational, and other public use.

Ada County Population and Growth Trends

Home to almost one quarter of the population of the entire state of Idaho, Ada County has experienced significant and consistent growth over the past twenty years and accelerated growth

during the past ten years. According to US Census Bureau estimates, Ada County saw a 10.7% increase in population from 2010 to 2015, to reach a total of 434,211 residents. It is the most populous county in Idaho and includes one-quarter of the entire population of the state. The total population of Idaho is estimated to be 1,683,140.

While the capital city of Boise accounts for the most significant portion of the population at approximately 218,000 residents, the incorporated cities of Meridian (over 90,000), Eagle (over 23,000), Kuna (17,000), Garden City (12,000), and Star (8,000) also contribute significantly to Ada County's current population total. Additionally, the unincorporated areas of the county have seen increased growth in recent years as farmlands and foothills outside of city limits have been converted to subdivisions and community developments.

Economic Conditions and Outlook

Economic development issues are highly important in Ada County, impacting population and development patterns, transportation and public facility needs, and overall quality of life for Ada County citizens. Ada County continues to enjoy a relatively strong economy that continues to attract businesses and jobs.

According to the Idaho Department of Commerce, per capita personal income for Ada County residents in 2015 was \$46,053 and remained well above the state average. The major economic drivers are computer product manufacturing, food product manufacturing, administrative support services and construction. Ada County currently has more jobs than its labor force supports, providing opportunities for residents of surrounding counties with opportunities, but creating excess traffic and commuting times.

According to the 2012 USDA Census of Agriculture there are 1,233 farms in Ada County totaling 144,049 acres. This is a loss of almost 50,000 acres from the 2007 census. Most of the farms in Ada County are below 50 acres, and half of those are below 10 acres. Although acreage in farms declined during this five year period, the market value of commodities sold from Ada County agricultural land actually increased from \$153,031,000 in 2007 to \$220,989,000 in 2012.

A declining land base in the agricultural sector resulting from continued urbanization of rural areas and rising land prices has had significant impacts on large scale agricultural operations. This is expected to continue and will likely result in many smaller scale operations becoming more involved in local produce marketing and specialty agricultural products and opportunities.

Resource Conditions, Trends, and Conservation Needs

Irrigated Cropland

Due to the low levels of precipitation in Ada County, most agricultural crops could not be grown without the benefit of artificial irrigation. The most common form of irrigation for crop production in Ada County occurs in the form of furrow irrigation. This method relies on the use of siphon tubes to divert water from irrigation ditches into furrows in farm fields. The furrows run parallel to the seed beds and allow for management intensive yet cost effective watering throughout the growing

season. Sprinkler irrigation via pivots or wheel lines (as well as drip irrigation) are much less labor intensive than furrow irrigation yet is also much more expensive and not as common in Ada County.

To facilitate water and weed management, it is common for agricultural producers to use several tillage operations before and during the growing season. Because of these tillage operations, the soil surface within the furrows is often disturbed and allows it to be transported in the irrigation water. Furrow irrigation without proper irrigation water management also causes in-field soil erosion and the potential for decreasing available organic matter and increasing fertilizer input expenses. The resulting effect is not only a reduction of yield, but often also results in non-point source delivery of sediment, phosphorus, bacteria, and other potential pollutants to receiving water bodies, including the Boise River. In fact, surface irrigated cropland was identified as one of the highest priority land uses for treatment in the Lower Boise Total Maximum Daily Load (TMDL) Implementation Plan for Agriculture.

Effective and affordable best management practices (BMPs) to address soil erosion and irrigation induced runoff, coupled with effective conservation education and outreach to agricultural producers, are the primary conservation needs for irrigated cropland. Implementation and education efforts related to BMPs such as irrigation water management, anionic polyacrylamide application, sediment basins, filter strips, conservation tillage, and conservation cropping sequences would effectively address the identified conservation needs. Irrigated cropland farmers need readily available technical and financial assistance to facilitate the implementation of these BMPs. To promote these practices, the District is working towards creating an Agricultural Innovation Farm that will demonstrate soil and water conservation practices for producers across the state.

Non-irrigated Cropland

Because of the low levels of precipitation inhibiting the ability to produce most of the commonly grown crops without irrigation, non-irrigated cropland in Ada County is rare. Although runoff from non-irrigated cropland can occur during winter and spring snow melt or heavy rainfall periods, soil erosion and pollutant delivery from these lands in Ada County is uncommon. Where non-irrigated croplands do exist, the greatest conservation need is likely irrigation delivery infrastructure to supply adequate water for crop production. This is a low priority for the Ada Soil & Water Conservation District.

Pasture and Hayland

Unlike irrigated cropland which relies on regular soil disturbances in the form of tillage operations, pasture and hayland in Ada County typically have significant vegetative ground cover. This ground cover decreases in-field erosion potential significantly when irrigation water is applied via furrow or sprinkler irrigation. As a result, pollutant delivery to receiving water bodies via soil erosion and sediment transport is uncommon. With water quality pollutants such as phosphorus and bacteria, the potential for irrigation induced runoff still exists from pasture and haylands. This is particularly relevant on smaller pastures with multiple animals (ranchettes), fields where manure is applied, and where irrigation water is applied without proper irrigation management.

Development of previously larger parcels of pasture and other agricultural lands into smaller (5-10 acre), subdivided pasture ranchettes is a consistent trend in Ada County. These ranchettes are often managed by residents whose primary income does not originate from farm related activities. Where previously one farmer tended to manage these lands, several different land managers become responsible for the natural resource conditions on the land. Horses or other types of livestock are often introduced into these newly developed ranchettes in greater numbers than previously existed before the land was subdivided. This often results in resource concerns and issues ranging from soil compaction, to water quality degradation and noxious weed proliferation. The greatest conservation need in these areas is typically natural resource conservation education for landowners and access to some technical assistance.

Rangeland

Much of the acreage in rangeland is located in the southern portion of Ada County between Kuna-Mora Road and the Snake River. While most of this rangeland is managed by the Bureau of Land Management (BLM) for grazing and public recreation, the Birds of Prey National Conservation Area and Department of Defense Orchard Training Area also occupy huge areas of southern Ada County.

The involvement of the Ada Soil & Water Conservation District regarding conservation activities on these lands is typically in a supporting role. Resource concerns typical to these rangeland areas typically include noxious weed proliferation, native vegetation/habitat reduction, and wildfire. Conservation needs on the southern rangelands of Ada County include technical assistance, financial assistance, and partnership for activities initiated by the agencies responsible for management of these landscapes. Post-fire vegetation restoration assistance is likely the most suitable role for the Ada Soil & Water Conservation District in these areas. In the Avimor Conservation Easement, the District plays a leading role in monitoring and maintaining rangeland.

Urban and Suburban Areas

Several separate natural resource concerns are inherent to any landscape that becomes more urbanized. In Ada County these resource concerns and trends include, but are not limited to: increased water demand, wildlife habitat fragmentation or elimination, increased flooding, storm water pollution, decreased aquifer recharge, air quality degradation, open space encroachment, and soil compaction. Due to the relatively strong economy, low cost of living, quality of life, and access to recreational opportunities, this trend of urbanization and suburbanization of Ada County is expected to continue.

The Ada Soil & Water Conservation District recognizes the need to evolve as an organization and adapt our conservation activities to include more opportunities for urban areas of the county. The greatest identified conservation need for the urban and suburban areas is education and outreach regarding natural resource conservation. This type of need can be addressed by the District homeowner education efforts as well as outreach to city officials and staff responsible for development strategies within cities. Effective communication and outreach strategies initiated by the District in these urbanizing areas and communities are important to help identify existing and future needs.

The Ada Soil & Water Conservation District also recognizes a need to implement Agricultural Land Preservation in Ada County, as well as statewide. Agricultural Lands provide several economic and environmental benefits to the community, including jobs, aquifer re-charge, and natural habitat to name a few. The District will work with organizations, state legislators, and city and county officials to implement an Agricultural Land Preservation Plan for our community.

Additionally, the Ada Soil & Water Conservation District recognizes the need to become more involved in the implementation of BMPs to address storm water runoff from urban and suburban areas. Although high volume runoff storm events are not typical in Ada County, they do occur, and the need exists to implement storm water BMPs (i.e., porous pavement, storm water retention wetlands, street swales, etc.) for demonstration purposes as well as practical application.

Rivers, Streams, and Riparian Corridors

The Boise River, its riparian corridor, and unique greenbelt park and trail system are critical to all aspects of life in the Treasure Valley. The health and condition of the river is extremely important to maintaining the quality of life for Ada County residents. It also provides much of the habitat necessary to sustain several different populations of fish and wildlife species in Ada County.

Encroachment and residential development on or near the Boise River floodplain and riparian corridor has been a disturbing trend in Ada County over the past several years. As development occurs, additional stresses are placed on the sensitive riparian habitats and flooding potential increases in the residential communities. Additionally, stream bank erosion resulting from lack of adequate riparian vegetation and historic stream channel modifications on various segments of the river has become a trend. The conservation needs identified for these areas include technical and financial assistance for stream bank engineering and stabilization, including bio-engineering with native vegetative species.

According to the Lower Boise River Total Maximum Daily Load (TMDL) Sub-basin Assessment, water quality in the Boise River as it meanders through Ada County is relatively good. Few exceedances to the identified water quality pollutant targets occur within the Boise River in Ada County. It is not until the river crosses the county line into Canyon County that water quality impairment issues become more critical. This is because most of the creeks and drains that carry non-point source pollutants from agricultural lands discharge into the Boise River within Canyon County. Dry Creek is one of the few identified exceptions in that it discharges to the Boise River while still within Ada County. Although not a high priority water body in terms of water quality concerns, the Dry Creek watershed has become a high priority area for the Ada Soil & Water Conservation District due to extensive stream bank erosion, encroachment of developments on critical riparian habitats, and increasing storm water concerns. Technical and financial assistance for stream bank stabilization, riparian area enhancement, and open space preservation are all needed in the Dry Creek watershed.

Although not a primary concern, there still exists a need to address the non-point sources of sediment, phosphorus, and bacteria in the other creeks and drains that ultimately discharge in Canyon County since many of them begin in Ada County. Technical and financial assistance for the

surface irrigated cropland areas of the county is needed to implement appropriate and practical BMPs to address these sources of potential pollution.

While several of the waterways in Ada County are managed by irrigation districts for water delivery and drainage, there is an increasing trend in the developing communities and cities of Ada County to identify potential opportunities to enhance the visual appeal and riparian function of these creeks and drains. As the suburban and urban communities continue to expand into the rural areas, there will be an increasing trend for management of these existing waterways to meet the needs of multiple community stakeholders. The Ada Soil & Water Conservation District has identified technical assistance and enhanced partnerships with the irrigation districts as critical needs for the establishment of practical, feasible, and visually appealing riparian area these multi-use waterways.

Groundwater

Monitoring groundwater quality and addressing contamination concerns is a continuing issue in Ada County. According to the University of Idaho, 90% of Idaho residents rely on groundwater as a source of drinking water and groundwater supplies nearly 20% of all agricultural irrigation water. Agencies, including Idaho Department of Water Resources (IDWR), Idaho Department of Environmental Quality (DEQ), United States Geological Survey (USGS), municipalities, and researchers at Boise State University (BSU) are working together to monitor groundwater levels and quality in Idaho.

Statewide monitoring of groundwater began with the sampling of wells in 1990. To date, there have been 2,130 wells sampled in Idaho and over 750,000 results. In Ada County, the city of Meridian has begun a sampling campaign to monitor uranium levels in groundwater.

Under the Safe Drinking Water Act, the Environmental Protection Agency (EPA) established Maximum Contaminant Levels (MCLs) for drinking water. These standards inform municipalities, private companies, and individuals what levels of contaminant are safe in their drinking water.

There are three main contaminants in southwest Idaho groundwater:

1. Arsenic. Arsenic. MCL is 0.010 mg/L. Arsenic is naturally occurring in the soils in many areas of the Treasure Valley. There is evidence that it has been released to groundwater through irrigation practices - both in rural and urban areas. 17% of wells in Ada County have at least one Arsenic MCL exceedance.
2. Nitrate. Nitrate: MCL is 10 mg/L. The major source of nitrate contamination in groundwater is human - farming practices such as agricultural fertilizer and septic tanks. 5% of wells in Ada County have at least one Nitrate MCL exceedance.
3. Uranium. Uranium: MCL is 30 µg/L. Uranium is naturally occurring, present in the shallower parts of the system. Increased uranium exposure can pose several concerns, including kidney toxicity and cancer risk. 20% of wells in Ada County have at least one Uranium MCL exceedance.

According to a study conducted by Boise State University, the three big drivers of change to the water budget are climate change, increased irrigation efficiency, and urbanization. Currently, in the

Treasure Valley, 80% of irrigation systems are surface and 20% of irrigation systems are pressurized. According to this study, pressurized irrigation systems are more efficient and half the amount of water is required. The study by BSU estimates that in 25 years, these statistics will flip and only 20% of irrigation systems will be surface, while 80% will be pressurized. Pressurized irrigation systems are more efficient insofar as half the amount of water is required. However, much of the upper aquifer system in the Treasure Valley would not exist but for the irrigation canals and irrigation of fields. Infiltration of water into the ground is a source of the groundwater. If one reduces the amount of water applied to fields, it will reduce the amount of groundwater recharge. The Ada SWCD can work to educate farmers about the pros and cons of different irrigation systems for groundwater quality.

Agricultural practices and increased urban growth have effects on groundwater in Ada County. The Ada SWCD will work with local agencies to develop actions and objectives to address groundwater quality. The Ada SWCD will work to create and distribute educational materials for farmers and the public (both private well owners and public drinking water consumers) about safe drinking water, water conservation, Best Management Practices (BMPs), as well as participate in and host events on the topic of groundwater quality.

Boise Foothills

In addition to providing a scenic backdrop, hundreds of miles of trails, and seemingly limitless recreation opportunities for Ada County residents, the Boise Foothills also provide several other natural resource benefits to the community. Critical deer and elk winter habitat, native and sensitive plant species, bird migration corridors, and flood control are just some of the amenities provided by the Boise Foothills.

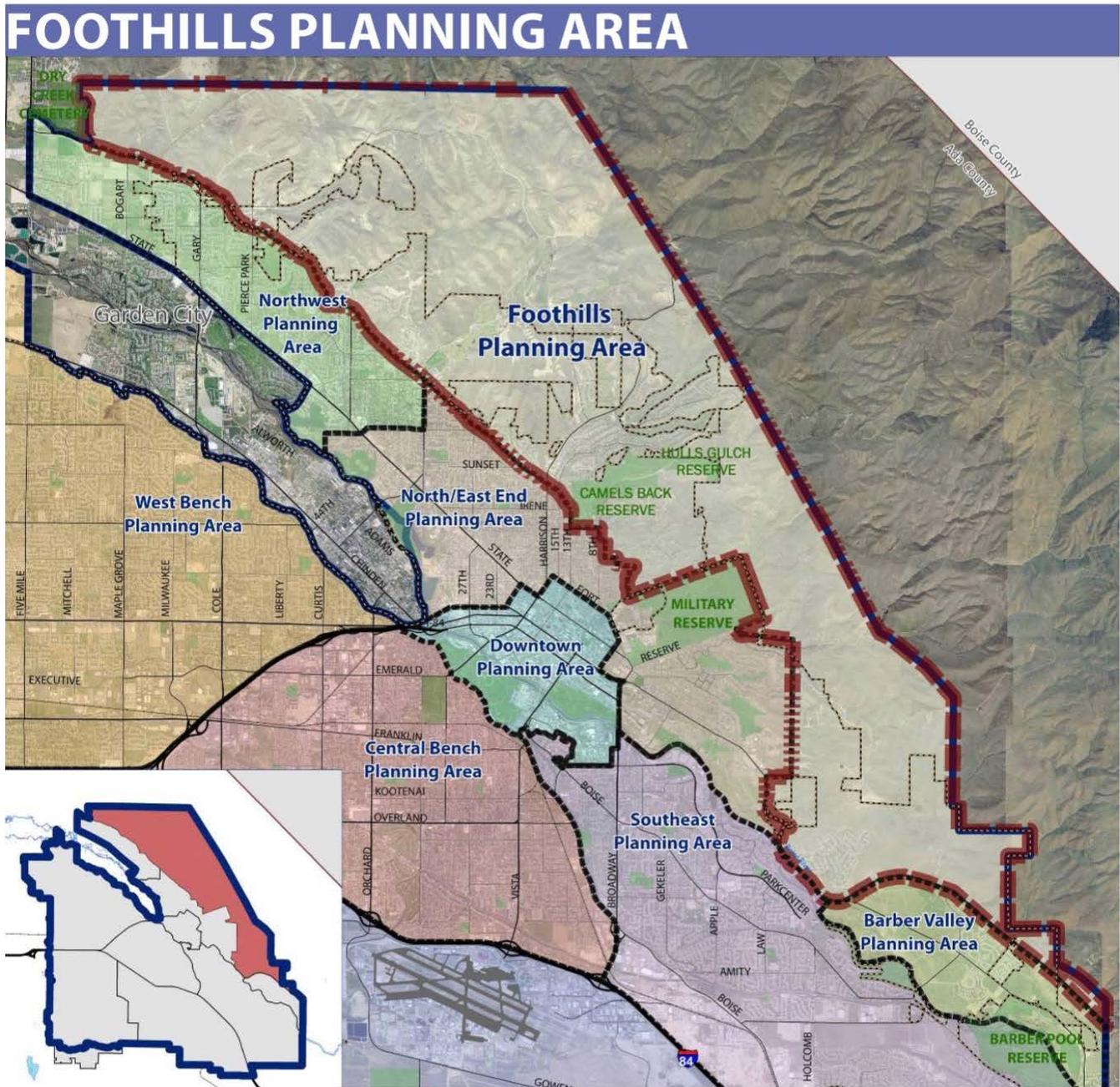
The natural resource concerns and trends in the foothills include increasing development pressures, increasing recreation pressures, noxious weed proliferation, erosion concerns, and increasing wildfire potential. Important to Ada County citizens, as identified in the Ada County Comprehensive Plan, is maintaining the balance of recreational and aesthetic values of the foothills with the natural resource values they provide.

Critical to maintaining this balance is open space preservation and active management of sensitive foothills habitats and recreational trails. The Ada Soil & Water Conservation District has identified conservation easement holding and management as a conservation need in the Boise Foothills. Although much of the foothills include federally and state managed land, active management of the privately-owned parcels for open space preservation is also needed. This is especially the case where newly developed Planned Communities have begun identifying foothills areas for new development. With active management of conservation easement parcels, identified negative resource trends (i.e., noxious weed proliferation and wildfire potential) can be addressed in a timely and effective manner. The Ada Soil & Conservation District feels it is well suited for this role and continues to seek new partnership opportunities with Planned Community developers to better serve the Ada County community in this capacity.

Critical Geographic Area

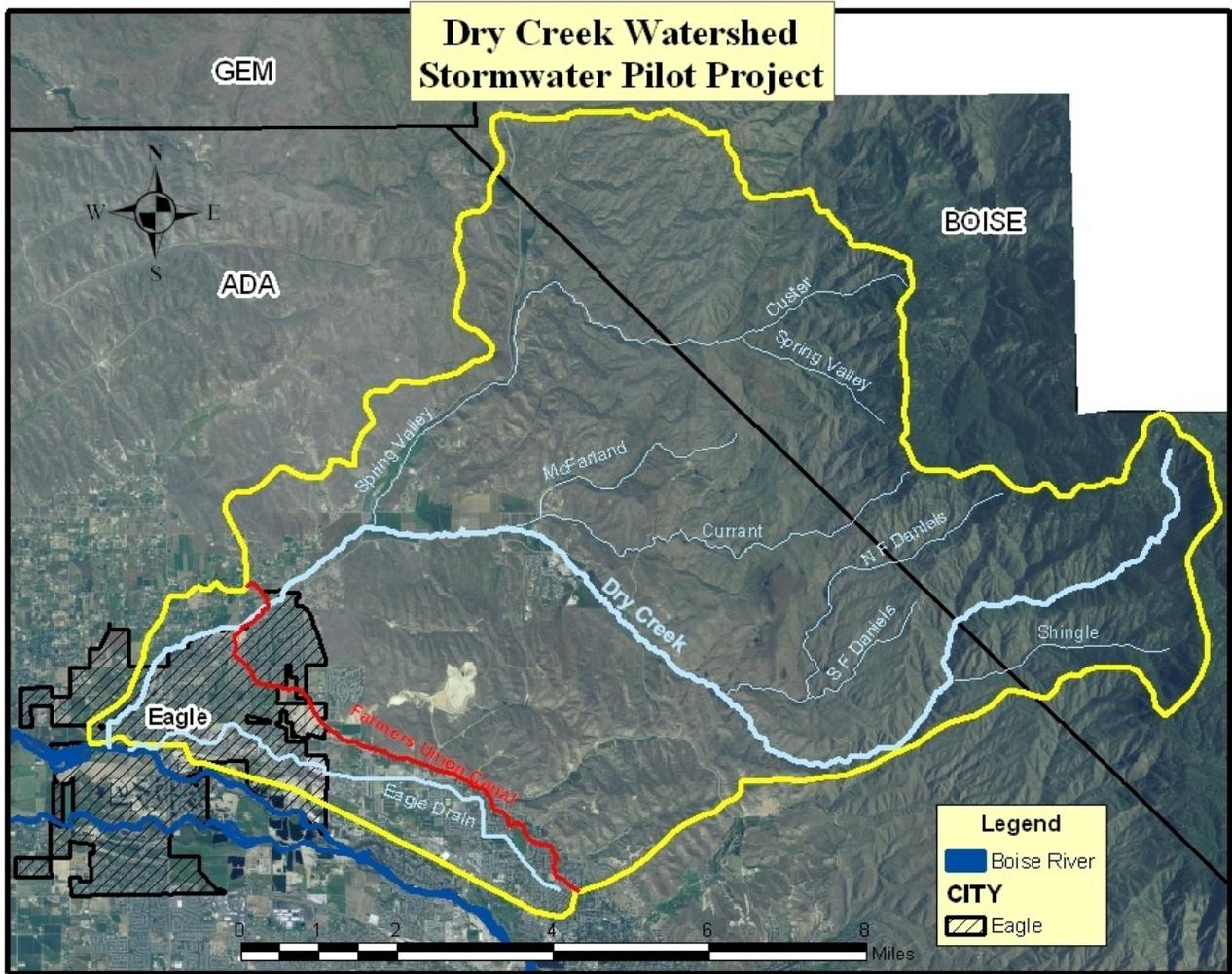
The Ada Soil & Water Conservation District has identified **five** critical geographic areas in which to pursue natural resource project implementation. Each area provides distinct conservation challenges as well as a diverse group of potential partners. They were chosen based on existing resource needs and the capabilities of the District to help address these needs. These areas include:

- 1) **Boise Foothills** (open space, wildlife habitat, recreation, wildfire, watershed issues)

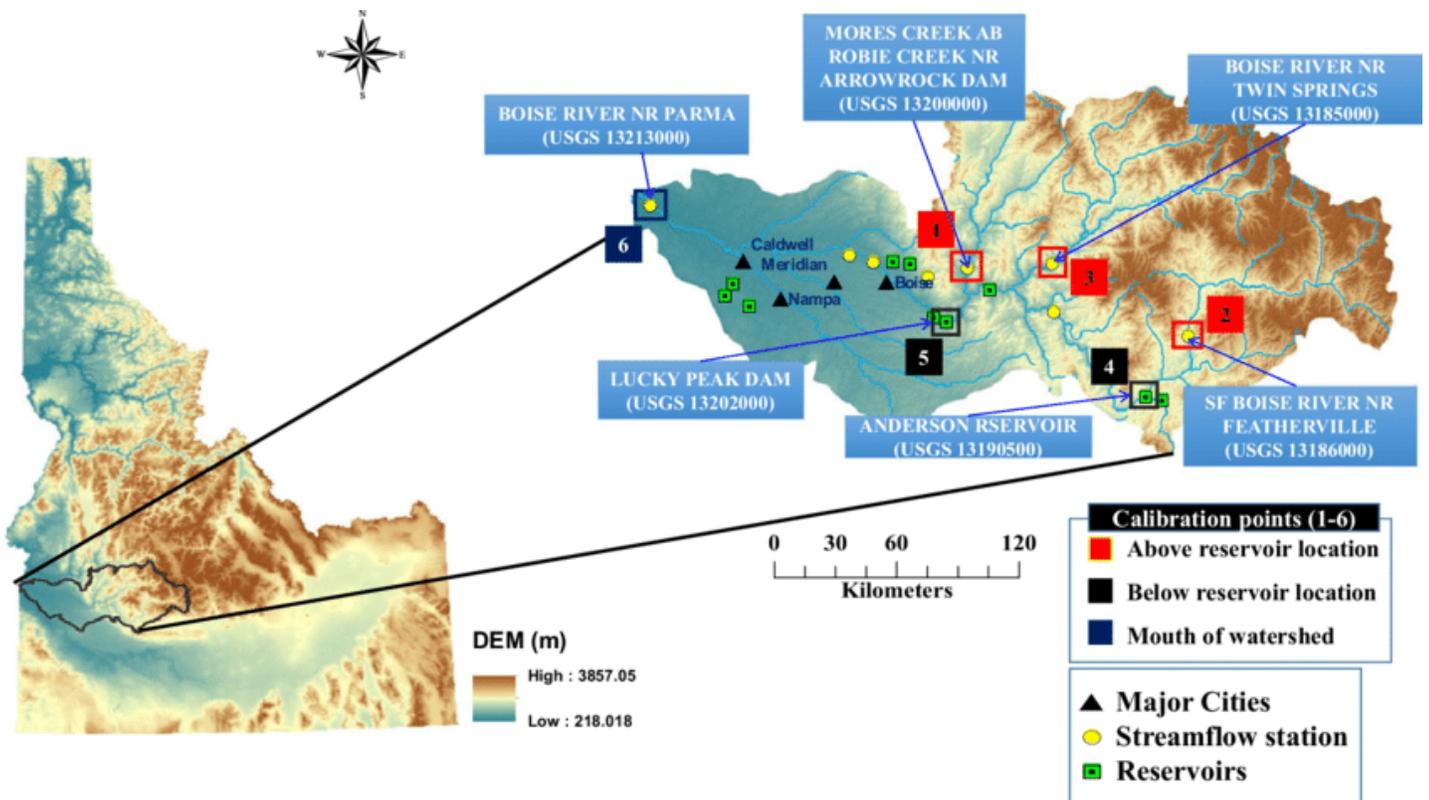
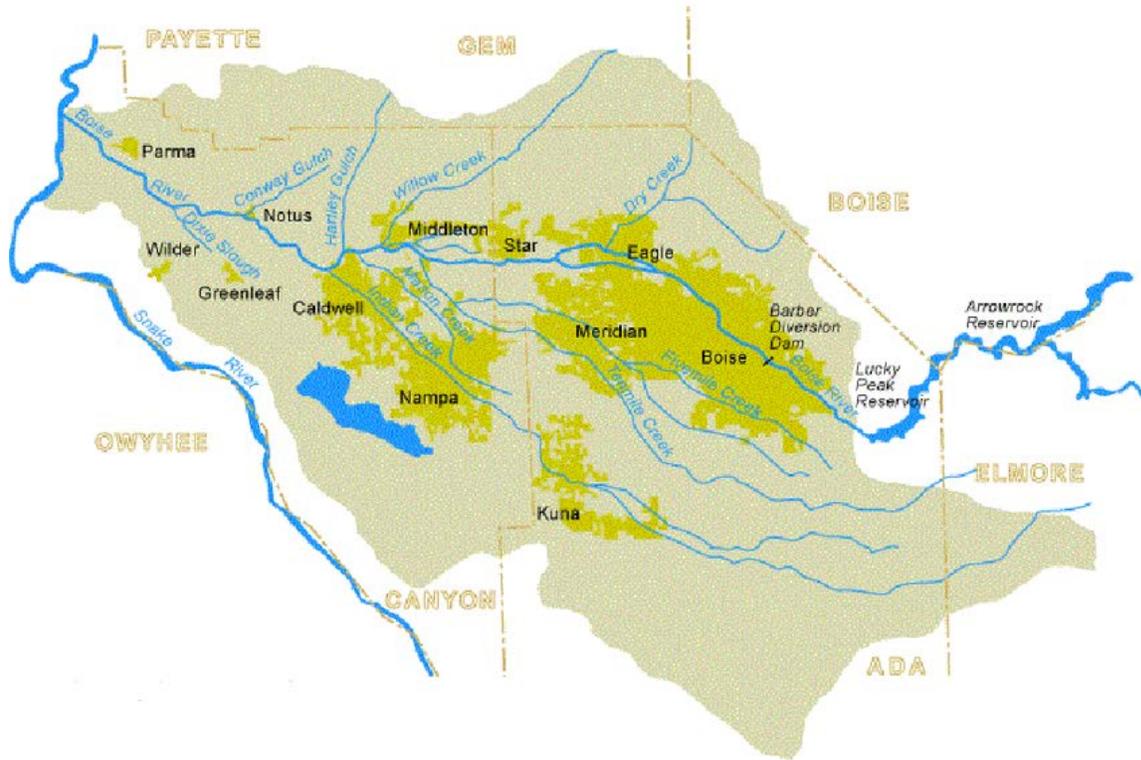


Source: *Blueprint Boise*

2) Dry Creek Watershed (open space, riparian habitat, stream bank erosion, storm water)

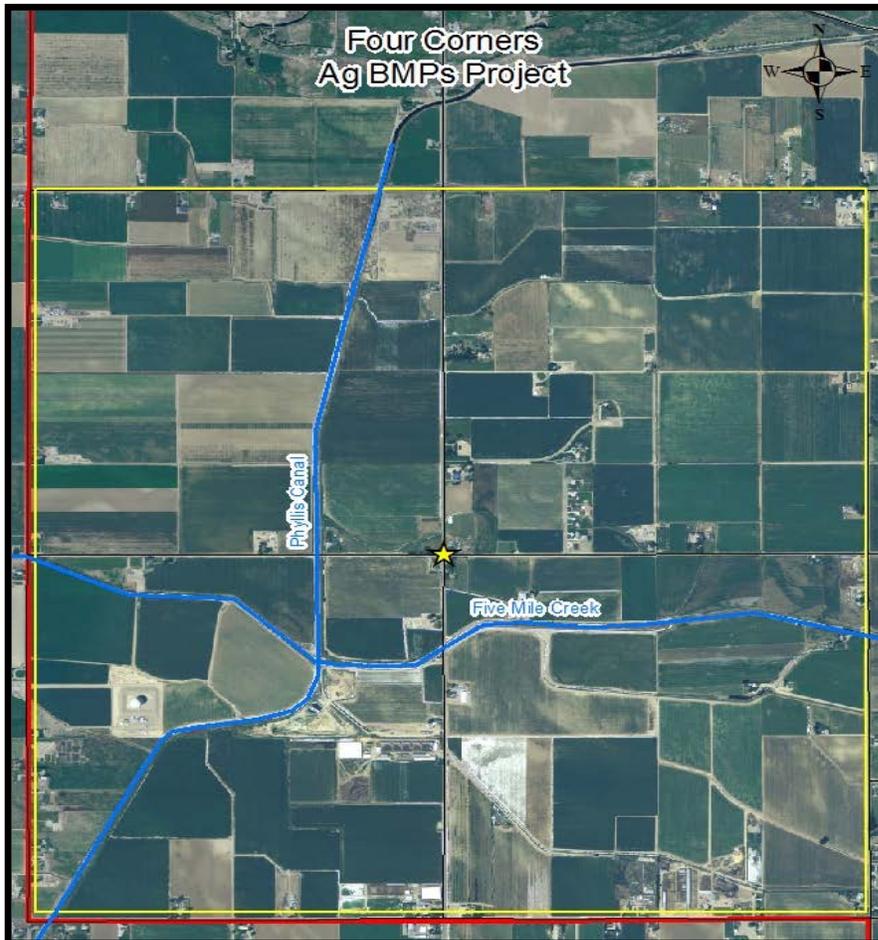
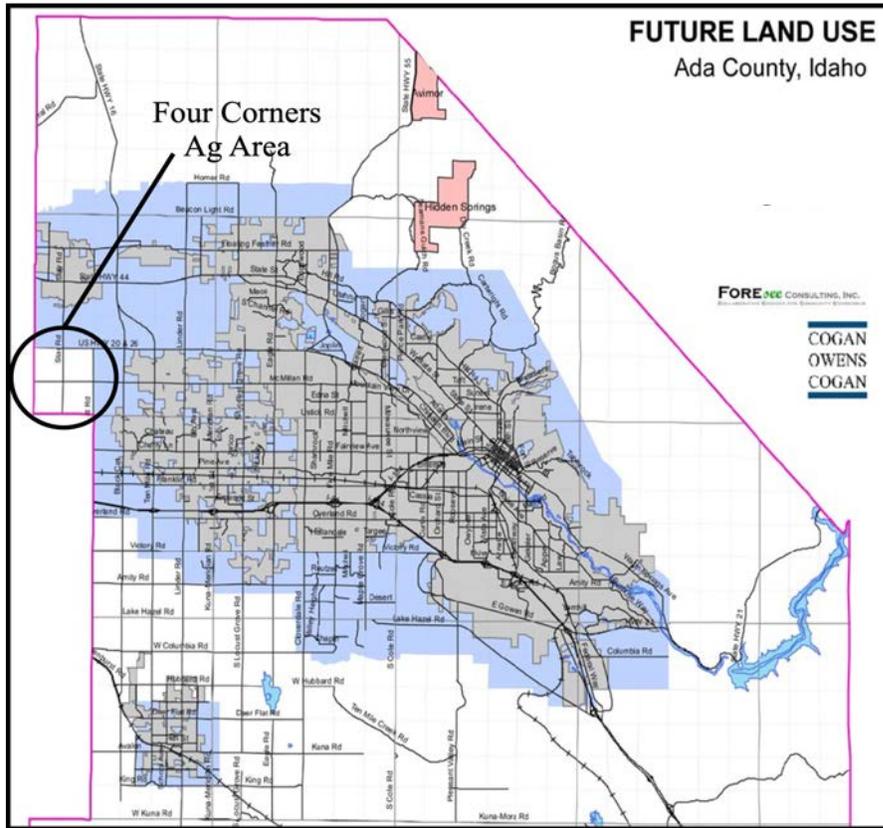


3) **Boise River Watershed** (stream bank erosion, habitat, recreation, flood control)

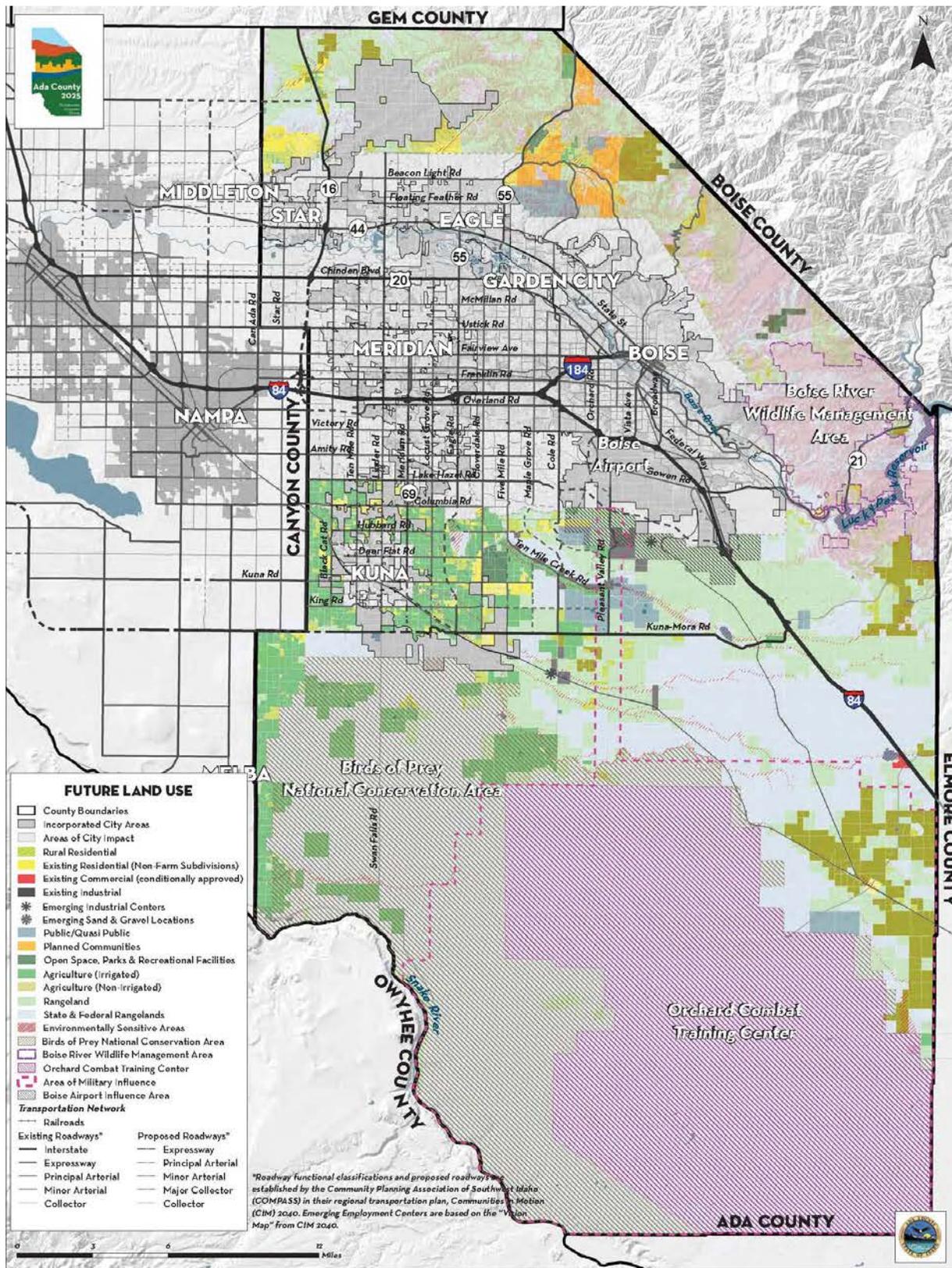


Source: Top map: Boise State University researcher, Bottom map: Journal of the American Water Resources Association

4) Four Corners Ag Area (irrigation induced erosion, water quality)



5) City Limits and Identified Areas of Impact (storm water, water conservation, education)





Ada Soil & Water Conservation District

Five-Year Resource Conservation Business Plan (January 1, 2022 – December 31, 2026)

For More Information Contact:
Josie Erskine, District Manager adaswcd@gmail.com (208) 345-8003

Organization of the Ada Soil & Water Conservation District

A political subdivision of the State of Idaho – authorities, powers and structure contained in Soil Conservation District Law, Title 22, Chapter 27, Idaho Code

- Organized in 1948 to provide voluntary land and water conservation technical and financial assistance to landowners and users within the Ada SWCD boundary

Current Board

Glen Edwards, Chair
 Bryce Durrant, Vice Chair
 Kent Foster, Treasurer
 Lynn McKee, Supervisor
 Paul Calverley, Supervisor
 Joan Cloonan, Supervisor
 Mike Pellant, Supervisor

Current Staff

Josie Erskine, District Manager
 Jessica Harrold, Program Coordinator
 Stephanie Rael, Office Administrator
 Crystal Davidson, Soil Education & Outreach

Function of the Ada Soil & Water Conservation District

To make available technical, financial and educational resources, whatever their source, and focus or coordinate them so that they meet the needs of the local land manager with conservation of soil, water and related natural resources.

Who We Serve & Why

- The residents, communities, organizations, agencies, governments, and groups within the boundaries of the Ada Soil & Water Conservation District to conserve natural resources for the beneficial and sustainable use by all.

Mission of the Ada Soil & Water Conservation District

- The Ada SWCD cooperates with federal, state, local, and private organizations and agencies to promote the conservation and wise use of all natural resources and to provide conservation education for Ada County residents.

Vision of the Ada Soil & Water Conservation District

- The vision for our district is to become the leader of natural resource planning, conservation, and project implementation in Ada County.

Values of the Ada Soil & Water Conservation District

- Private property owner rights and responsibilities
- Voluntary cooperation rather than regulatory authority
- Locally led, grassroots conservation efforts
- Practical, feasible, and appropriate best management practices
- Wise and sustainable use of natural resources regardless of land use
- Honesty, integrity, open communication, professionalism, and fiscal responsibility
- Conservation partnerships
- Conservation education and public awareness

Natural Resource Priorities:

The following are the six priority areas that have been selected by the Ada Soil & Water Conservation District as the emphasis for our Five Year Business Plan:

- District Operations
- Soil Health
- Water Quality and Water Resource Conservation
- Open Space and Natural Resource Management
- Information, Education and Outreach
- Urban Interface
- Farmland Preservation

Long-term Goals of the Ada Soil & Water Conservation District:

- Implement legislation to preserve agricultural land in Ada County and Statewide
- Create an Agricultural Innovation Farm to showcase soil and water conservation practices that can be applied to large and small farms and ranches throughout the state
- Implement a Conservation Management Plan on the Avimor Easement in coordination with our private and agency partners to set an example of how conserved lands can be well-managed working lands
- Partner with smaller organizations through grant funding to increase soil and water conservation efforts within Ada County
- Work with Avimor to complete the addition of property to the Conservation Easement
- Continue to be a valued partner to promote soil and water conservation through new projects, grants, and education in our community

Collectively the objectives, goals, and actions that we have developed related to these *natural resource priority areas* will be applied within the *priority areas* in Ada County. Land uses included are irrigated cropland, non-irrigated cropland, pasture and hayland, rangeland, urban and suburban areas, riparian corridors, foothills, and rivers and streams.

See 2020-2021 Annual Work Plan for specific details on how the District will implement the plans.



22-23 Plan of Work

Ada Soil & Water Conservation District

Conservation District Priority #1: Maintain District Operations

Goals: Achieve a standard of excellence as a Soil & Water Conservation District.

Objectives: To function appropriately, efficiently, and judiciously as a governmental subdivision of the State of Idaho according to Soil Conservation District Law (Title 22, Chapter 27, Idaho Code). To coordinate local leadership, technical expertise, and funding to implement conservation Best Management Practices (BMPs) with farmers, landowners and partners within the District.

Actions	Target Date	Individuals Responsible
1. Adopt an annual budget of revenues and expenditures	July 5, 2022	SWCD Board and Staff
2. Provide monthly updates of finances to Board of Supervisors and make budget adjustments as necessary	Monthly	SWCD Board and Staff
3. Individually account for revenues and expenditures for special projects such as Avimor, No-Till Drills, Field Days, Treasure Valley Pollinator Project, and the Innovation Farm	Ongoing	SWCD Board and Staff
4. Develop and timely submit annual budget requests and annual reporting to Idaho Soil & Water Conservation Commission and Ada County	March 2023	SWCD Board and Staff
5. Be an active leader in the Idaho Association of Soil Conservation Districts through Board and staff participation in Division meetings and the Annual Conference, volunteer to lead committees and provide presentations	Fall 2022 Winter 2023 Spring 2023	SWCD Board and Staff
6. Conduct an annual audit of financial statements	July 2022	SWCD Board and Staff
7. Demonstrate leadership by seeking grant funding for innovative projects	Ongoing	SWCD Board and Staff
8. Seek partnerships and coordinate with neighboring Conservation Districts, Cities, Ada County and nonprofit organizations to identify new opportunities	Ongoing	SWCD Board and Staff
9. Maintain website and other social media	Ongoing	SWCD Board and Staff
10. Perform annual reviews of contractor and staff positions	February 2022	SWCD Board and Staff



22-23 Plan of Work

Ada Soil & Water Conservation District

11. Review the Annual Plan to ensure compliance with actions and target dates	Quarterly	SWCD Board and Staff
12. Arrange two joint meetings with Ada County Commissioners to discuss District goals and achievements	Biannually	SWCD Board and Staff



Conservation District Priority #2: Promote Sustainable Agriculture and Soil Health

Goal: Provide opportunities to farmers to remain viable and profitable while enhancing soil health and natural resources.

Objectives: To provide affordable access to sustainable agricultural practices and increase the total acreage of agricultural land under no-till and conservation tillage in Ada and Canyon counties.

Actions	Target Date	Individuals Responsible
1. Partner with NRCS, Canyon SCD, seed companies and grower organizations to promote leasing the no-till drills in Ada and Canyon counties	Ongoing	SWCD Board and Staff
2. Partner with organizations and events such as the Payette SWCD and Soil Health Symposium to promote soil health practices	Tentative 2022	SWCD Board and Staff
3. Partner with NRCS for soil health research and demonstrations through the new Innovation Farm program	Ongoing	SWCD Board and Staff
4. Document the use and outcomes of the no-till drill, including acreage, crops planted, producer harvest and comments, and any items of note throughout the county, including increase in drill purchases	Ongoing	Staff
5. Begin on-farm consultation service to answer landowner questions and to promote conservation and soil health in agricultural practices	Begin 2022	Staff



Conservation District Priority #3: Urban/Rural Interface

Goals: Obtain and manage natural resource conservation easements that provide critical natural resource benefits for Ada County residents.

Objectives: Establish Ada SWCD as a leader in natural resource conservation management for holding and managing conservation easements.

Actions	Target Date	Individuals Responsible
1. Manage and maintain the Avimor Conservation Easement according to easement requirements, including educational sign maintenance and trail inspections. Work with Avimor as they expand their conservation easement	Ongoing	SWCD Board and Staff
2. Work with BLM and Stack Rock Grazing Association to monitor grazing at Avimor	Ongoing	Staff
3. Echanove Ranch Estates Conservation Easement – Coordinate conservation management activities with Ada County Commissioners, Ada County Staff and Echanove Ranch Homeowners. Review with County annually	Ongoing	SWCD Board and Staff
4. Hidden Springs Conservation Easement- Provide conservation easement management oversight as requested by Ada County for conservation easement property to ensure management requirements are being met. Review with County annually	Ongoing	SWCD Board and Staff
5. Work with City and County officials to offer conservation easement management assistance where appropriate. Review with County annually	Ongoing	SWCD Board and Staff
6. Be leaders and innovators in bringing forth projects that reduce weeds and fuel load for fires. Work with other organizations to figure out solutions to replant landscapes, reduce fuel loads, and create a working group to address fire in our district. We will also work with USGS and the NRCS to monitor the D7 plots	Ongoing	SWCD Board and Staff
7. Provide advice about proposed housing developments in regard to conservation efforts, environmental and recreational management, environmental education, and implementation of mitigation actions, in accordance with Ada County Code 8-8-5A	Ongoing	SWCD Board and Staff

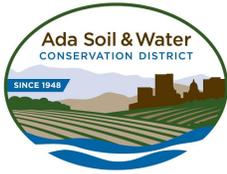


Conservation District Priority #4: Protect Water Quality and Quantity

Goals: Reduce sediment, nutrients and bacteria in surface water bodies by implementing Best Management Practices (BMPs) in high priority areas of Ada County, and by creating and enhancing surface water bodies for water quality improvement, wildlife habitat and open space.

Objectives: Enhance water quality in Ada County streams, irrigation conveyances, and aquifers to help achieve TMDL allocations for the Lower Boise River.

Actions	Target Date	Individuals Responsible
1. Work with irrigation districts in Ada and Canyon counties to identify water quantity and water quality project partnerships	Ongoing	SWCD Board and Staff
2. Participate and attend water quality and TMDL meetings, conferences and events as appropriate to remain engaged in current efforts and identify partnership opportunities for implementation within the Lower Boise River watershed, including the Idaho Water User’s Association and the Treasure Valley Water User’s Association	Ongoing	SWCD Board and Staff
3. Provide assistance to small acreage landowners and urban residents regarding water quality, wildlife, plant materials and water conservation	Ongoing	SWCD Board and Staff
4. Recognize the effect of agricultural activities on groundwater and work with agencies to develop actions and objectives regarding groundwater quality	Ongoing	SWCD Board and Staff



Conservation District Policy #5: Provide Community Information, Education and Outreach

Goals: Provide education and information to students, the general public, and partnership organizations to promote the conservation and wise use of natural resources in Ada County.

Objectives: Use traditional and non-traditional outreach platforms for distribution of conservation education information to potential partners, customers and schools, and to provide hands-on natural resource learning opportunities as identified in Ada SWCD Youth Conservation Education and Outreach Plan.

Actions	Target Date	Individuals Responsible
1. Plan, organize, provide outreach information, seek additional funding/contributions, and host 5 th Grade Conservation Field Days for 1,100 students	September 2022	SWCD Board and Staff
2. Promote student environmental education through Envirothon sponsorships	Winter 2022	SWCD Board and Staff
3. Promote student environmental education through Natural Resource Camp scholarships	Tentative 2022	SWCD Board and Staff
4. Host Speech and Poster Contests	September 2022	SWCD Board and Staff
5. Outreach to historically underserved and socially disadvantaged groups	Ongoing	SWCD Board and Staff
6. Expand our program outreach through the Community in Conservation grant program by partnering with local organizations to increase projects and educational events	Ongoing	SWCD Board and Staff
7. Continue work with NRCS to teach classes and workshops through the Innovation Farm program to educate the community about the importance of natural resources conservation, agriculture, and local food	Ongoing	SWCD Board and Staff
8. Host Treasure Valley Pollinator Project to promote pollinator habitat in the Treasure Valley. This program will get 64,000 flowering plants in the ground, educate participants on pollinator habitat and identification, and inspire community engagement and citizen science for pollinator counts and identification	Spring 2022	SWCD Board and Staff
9. Host farm tours through the Innovation Farm program to connect people with local farmers and to educate the community about the importance of a local food system	Spring 2022	SWCD Board and Staff



22-23 Plan of Work

Ada Soil & Water Conservation District

10. Hire part-time Soil Education & Outreach Coordinator to teach soil science to children and adults in a variety of venues	Spring 2022	Staff
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Conservation District Priority #6: Agricultural Land Preservation

Goals: Form Agricultural Land Preservation policies in Ada County and statewide

Objectives: Work with local organizations through outreach, education, and plan development to move towards an Agricultural Land Preservation Policy for Ada County and statewide.

Actions	Target Date	Individuals Responsible
1. Meet with Legislators, City Councils, and other officials regarding Agricultural Land Preservation	Spring 2023	SWCD Board and Staff
2. Partner with local organizations to host speakers on Farmland Preservation, and reach out to the general public for agricultural land preservation	Ongoing	SWCD Board and Staff
3. Display the farmland preservation board at events around the Treasure Valley	Ongoing	SWCD Board and Staff
4. Work with local groups to create a coalition for Agricultural Land Preservation	Ongoing	SWCD Board and Staff
5. Support the Ada County Commissioners in efforts to promote agricultural land preservation in Ada County	Ongoing	SWCD Board and Staff
6. Assist Ada County Commissioners in agricultural land research, including consultation on conservation plans and wildlife mitigation plans for developments, and creating an interactive map of remaining farmland in Ada County	Ongoing	SWCD Board and Staff
7. Continue to work with American Farmland Trust to bring forward innovative farmland preservation concepts and possible legislation.	Ongoing	SWCD Board and Staff