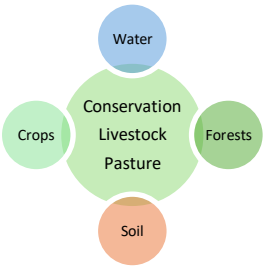


CANYON SOIL CONSERVATION

DISTRICT

2208 E. CHICAGO, SUITE A

CALDWELL, ID 83605

FIVE-YEAR RESOURCES CONSERVATION BUSINESS

PLAN

January 1, 2025 – December 31, 2029

FORWARD

The Canyon Soil Conservation District (Canyon SCD) is one of 50 Conservation Districts in Idaho. Idaho Soil and Water Conservation Districts are political subdivisions of state government but are not state agencies. Conservation Districts are charged with carrying out a program for the conservation, use and development of soil, water, and other natural resources.

Conservation Districts are the primary entities that provide assistance to private landowners and land users in the conservation, sustainment, improvement, and enhancement of the land. They are an entity for coordinating and implementing conservation programs, channeling expertise from all levels into action at the local level. Programs are non-regulatory; science-based technical assistance, incentive–based financial programs and informational and educational programs at the local level.

Both by legislation and by agreement, the USDA Natural Resources Conservation Service provides technical assistance to landowners and land users through Conservation Districts. Each Conservation District in Idaho has a signed Mutual Agreement with the Secretary of Agricultural and the Governor of Idaho that establishes a framework for cooperation.

This Annual Plan/Five-Year Resource Conservation Business Plan was developed not only to guide the Conservation District, but through the use of these abilities assist the landowners/users with the acceptable programs that will ensure a sustainable natural resource base for present and future generations in the Canyon Soil Conservation District.

This document identifies the resource needs in the Conservation District and presents a resource conservation action plan for meeting these needs.

CERTIFICATE OF ADOPTION

We, the Board of Supervisors of the Canyon Soil Conservation District this 6th day of March 2025 do hereby approve the following document known as the Resource Conservation Business Plan. This Plan will be in effect for a five-year period ending December 31, 2029, during which time it will be updated annually and/or amended, as necessary.

As evidence of our adoption and final approval, we do hereby affix our signatures to this document.

_____Clay Erskine, Chairman

_____Chris Gross, Vice Chairman

_____ Brad McIntyre Sec. /Treasurer

_____Alex Villifana, Supervisor

_____Tyson Meeks, Supervisor

_____Tate Walters
Treasure Valley High Desert Team Leader/District Conservationist

Table of Contents

I. Conservation District Structure and Governing Policies

A. Enabling Legislation, Legal Structure

The Canyon Soil Conservation District (Canyon SCD) is a legal subdivision of the State of Idaho deriving its authorities, powers and structure contained in Soil Conservation District Law, Title 22, Chapter 27, Idaho Code. The Canyon Soil Conservation District was formulated for the purpose of assisting landowners in conserving soil, in water resources and to effectively coordinate conservation activities within the District. This District may cooperate and enter into agreements with government agencies, private organizations, and with landowners for the purpose of conservation, development, wise uses and improvement of soil, water, and other natural resources within the boundaries of the district.

B. Powers and Authorities

The district and original program for the District was organized in 1951. The Canyon SCD focused on farm-related soil and water problems. Many farmers received help leveling their land, lining ditches, installing irrigation pipelines, developing conservation cropping systems, and learning to utilize crop residues for better soil and water conservation. Irrigation companies received help upgrading their canals and diversions and improving water-measuring devices along the Boise River.

The first supervisors to serve the Canyon County Soil Conservation District were Irvin Callahan 1951-1955, and Perry Christensen 1951-1954, both from Caldwell. Leon Henricks 1951-1957, Mark Terrel 1951-1952, and Jack Obermeyer 1951-1953, all from Middleton.

C. Current District Board & Associate Supervisors

BOARD MEMBERS - Jan/Feb 2025

Clay Erskin, Chris Gross, Brad McIntyre, Tyson Meeks, and Alex Villafana.

ASSOCIATE BOARD MEMBERS; Mike Swartz, Rex Runkle, Bob Mckellip & Rich Sims

D. District Administration and Operations

Canyon SCD programs are administered by a five-person board of supervisors elected by the citizens of Canyon County. Supervisors serve staggered four-year terms. There are currently four associate supervisors serving in advisory capacities. Regular meetings are held monthly, and special meetings are called as they are needed.

The district provides landowners and land users with a self-governing system enabling them to:

1) Cooperate in solving soil, water, and conservation issues.
2) Receive assistance from local, state, and federal agencies to address solving the soil, water and conservation issues.

The original program for the district was based on the needs and issues in 1951. The program was revised in 1969 to meet the identified needs at that time. Much of that program has been accomplished.

The Canyon Soil Conservation District advises and assists landowners and land users when plausible in the preparation and implementation of conservation plans. Emphasis is placed on improved soil and water techniques which will result in higher production, reduce soil erosion, and improve water quality.

The district will continue to be a resource to the county and city officials in areas of comprehensive planning for wise land use and will assist individuals and groups with educational information on soil conservations mission.

The district publishes an informative newsletter quarterly and has articles published in the local newspaper. The district sponsors the conservation poster contest, speech contest, and an Envirothon team. The district provides scholarship money for a student or students to attend the Natural Resources Workshop. The district supports both the State and Local Judging Contest sponsored by the FFA Chapter. District supports the State Envirothon.

The Canyon Soil Conservation District formed a partnership in 2009 with the Lower Boise Watershed Council (LBWC) by providing administration and technical assistance for the “Treasure Valley BMP Implementation 319 Project”.

Owners and operations of agricultural lands can apply for the 319-grant funding to implement conservation practices that protect and enhance water quality.

Water Quality Program Agriculture since 2022 when it was established Five projects have been developed and paid for under this program in Canyon County Total of $696,900 for gravity to sprinkler, Gravity to Drip and Irrigation Water control. Acres Treated 550 Averaging 1925 Tons of sediment and 3850 lbs. Phosphorus

.

BUBBLER SE PARMA 319 FUNNDING & WQPA

CENTER PIVOT DEIGN BY SCT Stan Haye for EQIP, WQPA & STATE 319 GRANT FUNDING 2023 $656,000.00 Project On Mason Creek 100 hp Pumping Plant on Mason Creek Slough WQPA was used too.

Drip Irrigation on Mint Farm SE WILDER 2024 WQPA Funding

<WQPA : DRIP IRRIGATION FILTRATION THREE SAND FILTER CONTAINMENT CYLINDERS >

Canyon SCD submitted a several 319 Sub State and Federal Grant proposals to the TAC and LBWC During the 2022- 2024 seasons with funding of said projects at $1,066,200.00 averaging 40% with producers 60% or $1,777,000.00Total of $2,843,200.00 that helped reduce the sediment loading on the Lower Boise River and Snake Rivers .Total Reductions during those periods were 5,667 Tons of Sediment and 11,334 lbs. of TP .

2022 – 2024 Five Water Quality Agriculture Programs were funded in Canyon County.
Conservation Technical Assistance (CTA) was provided to These producers on 450 acres .For Gravity to Drip Irrigation Gravity to Sprinkler and a structure for water control.

During that same time 4100 acres of No-Till Drill use from the Canyon Counties three Drills were accomplished making strides in Best Management Practices. Site visits, engineering designs, analysis, and recommendations for irrigation systems including improved gravity systems, sprinklers, drip, and POD systems

E. District Objectives

1. Develop and/or implement programs for better soils and water management using all available tools (Such as our three No Till Drills)
2. Emphasize programs which have enduring conservation benefits, production gains, include energy use, etc. EQIP ,NWQI NO TILL DRILLS . Small Farms Green Houses, Truck Gardens ,& new Grazing strategies.
3. Strong educational effort with: A-Cooperators of programs, B-Institutions public and private, C-General public County Commissioners to Emphasize the WQPA Program
4. Cooperate with NRCS, ISWCC, and DEQ in applying conservation programs Such as the 319 Grant Programs within the Lower Boise River and Snake Rivers
5. Lend assistance and work with agencies and units of government with whom we have memorandums of understanding Such as the Fresh Water Trust and Idaho Power
6. Support wildlife habitat establishment and maintenance of Stream Beds, bank work and sediment removal.
7. Provide Technical help on parks, greenbelts, nature trails, etc.

F. District Priorities

1. NRCS, ISWCC, and DEQ in applying conservation programs such as (EQIP) Environmental Quality Incentive Program, (NWQI) National Water Quality Incentive .(WQPA) Water Quality Program Agriculture.
2. Oversee 319 Grants Both State and Federal to seek out, design, and certify for payment New Applications for Gravity to Sprinkler Conversions, Gravity to Drip Irrigation. Bank Stablization for Rivers and Streams.
3. Small farm acreage support through Government Programs

G. District Boundaries

The boundaries of the district were originally drawn to include farmers and ranchers who wanted the services of a district and excluded those whose fear was an increase in taxes and government control over their land. The Canyon Soil Conservation District was organized in April 1951 and was comprised of the Second Unit of the Black Canyon Irrigation Project. The South Canyon SCD was organized in 1957 covering generally the southern half of Canyon County. In 1975 the South Canyon SCD and Canyon SCD were consolidated to form the present Canyon Soil Conservation District, which covers all of Canyon County with the exception of the corporate limits of Caldwell, Nampa, Parma, Notus, Middleton, Wilder, and Melba.

H. District Resources

1) Main Land Use

The original farmers of this county took desert sagebrush and developed the landscape into prime farmland and made it productive with the use of the irrigation infrastructure that gives Canyon County Idaho uniqueness. Prime farmland is identified as the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, seed, and oilseed crops. In general, prime farmlands have an adequate and dependable water supply, a favorable temperature and growing season, an acceptable pH, and few or no rocks. They are permeable to water and air, not excessively erodible, not saturated with water or subject to frequent flooding.

-

Canyon County has 277338 acres of Prime farmland, according to the 2022 census
(see pages 13 & 14)

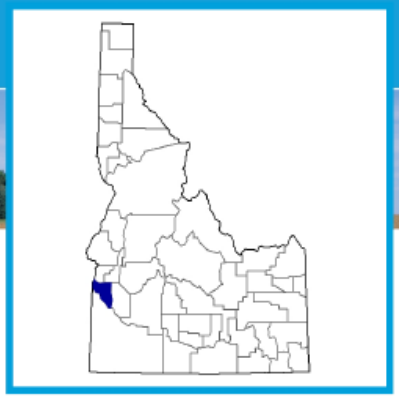
Unique farmland is land other than prime farmland that is used to produce specific high value food and fiber crops.

It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are fruit orchards, citrus groves, nut trees, olives, cranberries, and vegetables.

In 1978, public meetings were held to identify resource concerns in the county. Some of the land related problems identified during these meetings include the following:

1. The loss of prime farmland to other uses such as subdivisions, industrial and commercial developments.
2. Agricultural land should be taxed on its production capabilities, rather than its value for housing or other development.
3. Leased land farming--The renter is limited in making conservation decisions.
4. Trespassing--Hunting on private land with little or no regard for the owner's property.
5. Valuable topsoil is being lost, and the sediment is polluting streams.
6. The cost of implementing erosion control practices is high; the landowner is not benefiting financially in the short run.
7. Wind erosion is severe in some areas. .(Stream Pollutants such as sediment in this picture)

2022 CENSUS OF AGRICULTURE *County Profile*



Canyon County
Idaho

Total and Per Farm Overview, 2022 and change since 2017

	2022	% change since 2017
Number of farms	2,311	+1
Land in farms (acres)	277,388	+1
Average size of farm (acres)	120	-0
Total	($)	
Market value of products sold	829,378,000	+44
Government payments	4,426,000	+80
Farm-related income	26,659,000	+18
Total farm production expenses	727,202,000	+39
Net cash farm income	133,261,000	+71
Per farm average	($)	
Market value of products sold	358,883	+43
Government payments [a]	46,585	+246
Farm-related income [a]	43,068	+23
Total farm production expenses	314,670	+38
Net cash farm income	57,664	+69

8 Percent of state agriculture sales

Share of Sales by Type (%)

Crops	55
Livestock, poultry, and products	45

Land in Farms by Use (acres)

Cropland	228,177
Pastureland	30,325
Woodland	1,061
Other	17,825

Acres irrigated: 207,577
75% of land in farms

Land Use Practices (% of farms)

No till	5
Reduced till	9
Intensive till	19
Cover crop	6

Farms by Value of Sales

	Number	Percent of Total [b]
Less than $2,500	942	41
$2,500 to $4,999	308	13
$5,000 to $9,999	279	12
$10,000 to $24,999	244	11
$25,000 to $49,999	118	5
$50,000 to $99,999	87	4
$100,000 or more	333	14

Farms by Size

	Number	Percent of Total [b]
1 to 9 acres	1,056	46
10 to 49 acres	789	34
50 to 179 acres	207	9
180 to 499 acres	122	5
500 to 999 acres	73	3
1,000+ acres	64	3

USDA
United States Department of Agriculture
National Agricultural Statistics Service
www.nass.usda.gov/AgCensus

2022 CENSUS OF AGRICULTURE *County Profile*

Market Value of Agricultural Products Sold

	Sales ($1,000)	Rank in State [c]	Counties Producing Item	Rank in U.S. [c]	Counties Producing Item
Total	**829,378**	**5**	**44**	**71**	**3,078**
Crops	**453,907**	**2**	**44**	**53**	**3,074**
Grains, oilseeds, dry beans, dry peas	98,426	4	42	634	2,917
Tobacco	-	-	-	-	267
Cotton and cottonseed	-	-	-	-	647
Vegetables, melons, potatoes, sweet potatoes	138,700	6	41	37	2,831
Fruits, tree nuts, berries	23,978	1	36	115	2,711
Nursery, greenhouse, floriculture, sod	16,199	1	42	206	2,660
Cultivated Christmas trees, short rotation woody crops	-	-	8	-	1,274
Other crops and hay	176,604	1	44	8	3,035
Livestock, poultry, and products	**375,471**	**6**	**44**	**125**	**3,076**
Poultry and eggs	2,801	3	44	727	3,027
Cattle and calves	82,217	8	44	168	3,047
Milk from cows	279,233	5	30	38	1,770
Hogs and pigs	(D)	(D)	40	(D)	2,814
Sheep, goats, wool, mohair, milk	3,764	3	44	38	2,967
Horses, ponies, mules, burros, donkeys	1,343	1	44	216	2,907
Aquaculture	(D)	7	21	(D)	1,190
Other animals and animal products	4,657	1	43	49	2,909

Producers [d]	**4,260**
Sex	
Male	2,513
Female	1,747
Age	
<35	411
35 – 64	2,591
65 and older	1,258
Race	
American Indian/Alaska Native	29
Asian	24
Black or African American	5
Native Hawaiian/Pacific Islander	4
White	4,163
More than one race	35
Other characteristics	
Hispanic, Latino, Spanish origin	193
With military service	395
New and beginning farmers	1,684

Percent of farms that:

Have internet access	**88**
Farm organically	**(Z)**
Sell directly to consumers	**9**
Hire farm labor	**19**
Are family farms	**96**

Top Crops in Acres [e]

Forage (hay/haylage), all	47,739
Wheat for grain, all	38,781
Corn for grain	23,758
Corn for silage/greenchop	23,669
Vegetables harvested, all	22,531

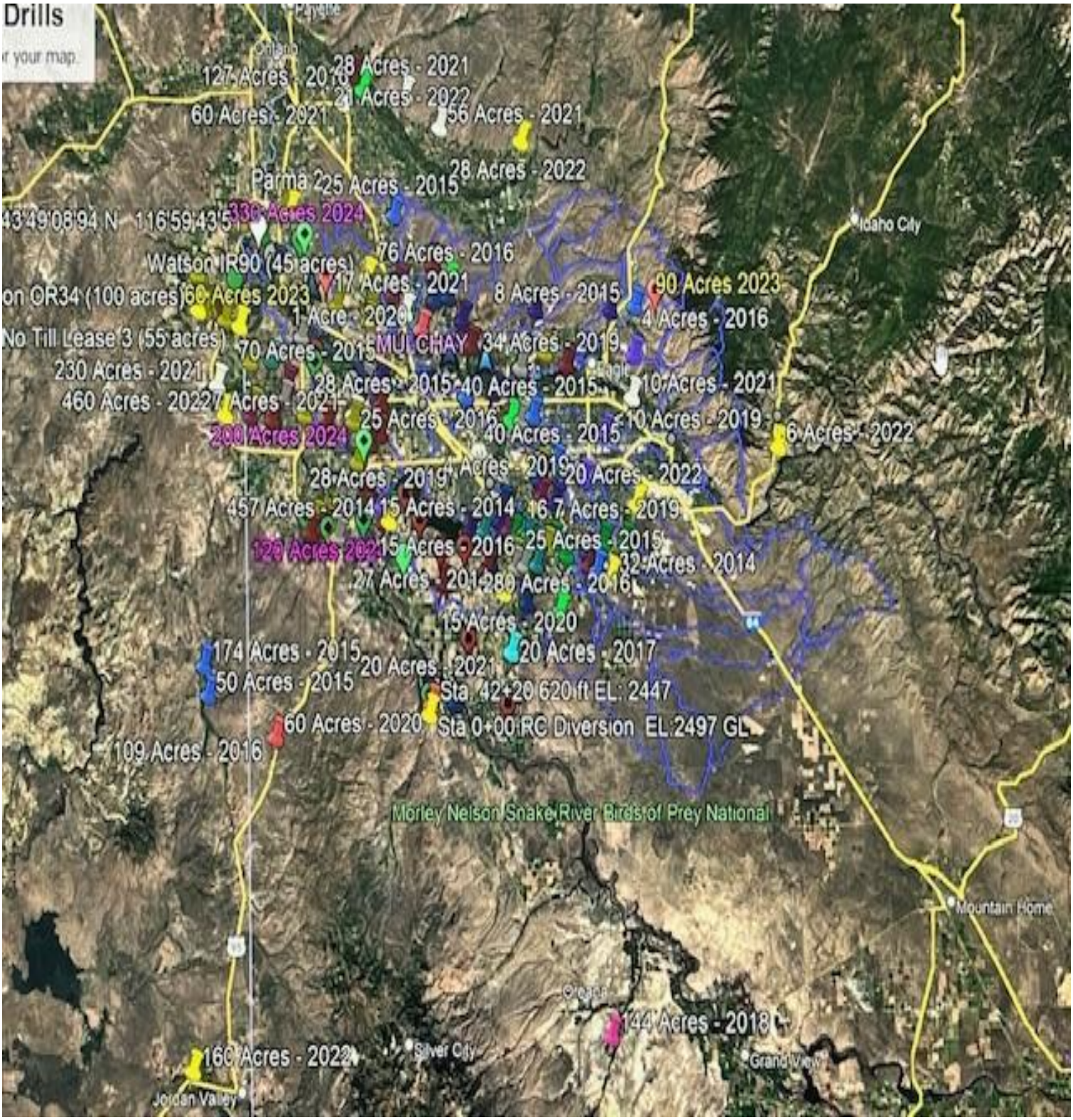
Livestock Inventory (Dec 31, 2022)

Broilers and other meat-type chickens	2,056
Cattle and calves	139,467
Goats	3,003
Hogs and pigs	1,206
Horses and ponies	3,664
Layers	31,361
Pullets	982
Sheep and lambs	15,767
Turkeys	3,059

[a] Average per farm receiving. [b] May not add to 100% due to rounding. [c] Among counties whose rank can be displayed. [d] Data collected for a maximum of four producers per farm. [e] Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. [f] Position below the line does not indicate rank. (D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

In June 2020, Canyon SCD purchased a NO-Till Drill for landowner/operators to rent during the planting season. Acquiring the ADA County 15 ft No Till Drill and In February 2024, Canyon County SCD Purchased a 6ft Drill for small scale farms.

Now Average acres treated are about 1500.



From Wiser, to Jordan Valley , Onterio to Grandview


1206NT

1) Soil Health is a major concern with Canyon SCD. The Canyon SCD is educating landowners, public and the students of the importance of Soil Health. Cover crops, No-Till, Strip Till farming, and Best Management Practices are ways that helps the total soil health.

2) Soil Resources

Canyon County, with an area of 587.37 (in 2010) square miles of land, includes generally level, rolling, and bench terrain which rise from elevations of 2200 feet along the Snake River to 2800 feet in the Black Canyon area in the northeast corner of the county. The Boise River flows across the center of the District from east to west. The Snake River forms the west and south boundaries. Other perennial streams are Indian Creek, Five Mile, Sand Hollow and Willow Creek.

The County has a complex geologic history involving volcanic activity interspersed with the action of local rivers and torrential floods of glacial origin. Surface materials consist of alluvial deposits along the Snake and the Boise rivers and tributaries. Elsewhere terrace gravels predominate with occasional basalts which are exposed as prominent landmarks in isolated places.

3) Climate

Based upon a 35+year record at the nearby Boise Airport, Canyon County has a dry temperate climate of cool wet winters and warm dry summers. Temperatures during the day may fluctuate widely. In the summer, hot periods range from a few days in length to several weeks long. In winter, cold spells will range from a few days to several weeks long. The main annual temperature is 51 degrees F with main monthly temperatures of 29 degrees F in January and 75 degrees F in July. Extremes of 107 degrees F and -30 degrees F have been recorded. The average dates of killing frosts are May 7th and October 3rd, allowing an average frost-free period of 150 days. Southeast winds predominate with an average of 9 miles per hour. Relative humidity averages about 58 percent. The annual precipitation varies from 6.5 to 11.7 inches with most of it falling as rain or snow in the winter months. The high percentage of cloudless days combined with the control of moisture, makes Canyon County one of the most productive agricultural counties in the Nation with high crop diversity and intensive farming methods.

I. Cooperating Conservation Partners

The Canyon Soil Conservation District is one of 50 Districts in Idaho who works in a partnership with the Idaho Soil and Water Conservation Commission and with the Idaho Association of Conservation Districts. The USDA Natural Resources Conservation Service provides technical assistance to the landowner, creating their conservation plans and helping them to deal with their conservation resource problems.

J. COOPERATING AGENCIES

Bureau of Land Management	208-384-3300
Canyon County Commissioners	208-454-7507
Caldwell Chamber of Commerce	208-459-7493
Canyon Extension Service	208-459-6003
Canyon Planner	208-454-7340
Environmental Protection Agency	208-378-5743
Idaho Association of Soil Conservation District	208-895-8928
Idaho Department of Water Resources	208-287-4800
Idaho Division of Environmental Quality	208-373-0464
Idaho Fish and Game	208-465-8465
Idaho Soil & Water Conservation Commission	208-332-1790
Idaho State Department of Agriculture	208-332-8503
National Fish & Wildlife Deer Flat Refuge	208-467-9278
Natural Resources Conservation Service	208-779-3447
USDA Farm Service Agency	208-779-3430

II. Resource Conditions, Trends and Conservation Needs

A. Population

The population of Canyon County referenced from the Canyon County Workforce Trends; July 2024 266,892 residents. The population grew 35,776 or 13 % since April of 2020. Growth remains robust over the past year posting a 3.1 percent gain, the highest since 3 percent in 2008. Nampa's population 114,268 up from 93,590, in 2017. a 19 percent increase from 2017. Caldwell had a 26 percent increase to 73,466 2025 up from 54,660. Middleton with a population of 11,016 is up from 7,439 growth at 33 percent. The population increase is in non-agricultural occupations. The number of full-time farmers is dropping with a shift to more part-time farmers who earn a substantial part of their income from off-farm activities.

Canyon County's total employment rose from **27,175** in 1969 to **123,935** in 2025, for a net gain of **98,760**, or **456%**.

	2024	2020
Total covered employment	85,398	68,046
Agriculture	3,400	3,400
Mining & Natural Recourses	3,274	41
Construction	10,696	6,568
Manufacturing	11,053	10,468
Trade, Utilities & Transportation	20,091	13,235
Information	537	675
Financial Activities	2,045	1,806
Professional & Business Services	7,143	5,184
Educational & Health Services	17,841	9,281
Leisure & Hospitality	7,452	6,078
Other Services	2,192	1,797
Government	?	9,515

B. Agricultural Economy

In 2017, there were approximately 2,289 farm operating units in the district with an average size of about 120 acres, with the total number of acres being, 274,952. Major crop enterprises include:

1. General row crops such as sugar beets, potatoes, field corn, small grain, onions etc. Highly specialized crops include mint and hops.
2. Commercial seed crops include a wide variety of vegetable seeds including alfalfa and clover seed.
3. A wide variety of fruit orchards and vineyards (wine grapes).
4. Forage crops include alfalfa and grass hays, corn ensilage and tame pasture.
5. Commercial Nurseries

Major livestock enterprises include:

1. Dairy
2. Beef
3. Sheep
4. Hogs
5. Some poultry

The district consists of moderately large dairy operations, as well beef, sheep, and hog operations dispersed throughout the county. The larger operations are primarily confinement type feedlots while the small beef, sheep and hog operations usually utilize pastures.

The trend continued until recently toward fewer and larger farms; however, according to the latest USDA reports a return of many smaller operations is a focus. The number of dairy operations continued to decline but has now stabilized. The rapid growth threatened the stability of Canyon County agriculture until the 2008 financial decline. Canyon County still ranks high in the nation in the production of alfalfa seed and

sweet corn seed.

Some of the major problems facing the crop and livestock producers include the following:

1. Production costs and equitable returns
2. The availability of dependable labor.
3. Regulations (animal waste, sediment, chemicals etc.).
4. Markets for products, crops, and animals such as sheep and hogs.
5. Soil problems-resurfacing lava rock, low organic soils.
6. Water storage.
7. The Economic downturn.
8. Availability of fuel.
9. Disease control, interstate transfer of livestock.
10. High interest rates and ability to borrow money.
11. Loss of Agriculture related businesses (seed companies, implement dealer's slaughterhouse, etc.)

There are approximately 9,258 acres of rangeland in the district. The rangeland consists largely of annual grass and scattered sagebrush- type range. Most of the original bunchgrass has disappeared through mismanagement. Low rainfall makes re-seeding to improved perennial type grasses difficult. Some of the private range is being converted to cropland by irrigation developments; there is also considerable residential development on these lands.

Agri-business operations make up a large part of the economy. Without these businesses, agriculture - as we know it today - would be impossible. Included are plants for processing dairy products, potatoes, sugar beets, hops, mint, and corn; also, facilities for packaging and transporting fruit, vegetables, and other farm produce. Seed companies have facilities for processing the large volume of seed crops produced. There are also farm and irrigation equipment manufacturers and dealers, feed processing plants, seed, fuel, and chemical supplies. There are many financial institutions to handle agriculture's financial needs.

C. District Operations

1) Administration: The focus of the Canyon Soil Conservation District was to assist in every way possible to help with ideas and practices that best suited the needs of the cooperator and the lay of the land for the erosion of soil and preservation of water and other necessary natural resources. We would accomplish this by making available, whatever the source, educational resources (some of our knowledge of years of experience), financial (whenever it would fit a practice) and cooperating with the Districts NRCS Conservationist to assist the needs of the local landowner/manager with conservation of their soil and water. Emphasis has always been placed on improved soil and water management techniques which will result in higher production, reduced soil erosion, improved water quality. Our mission was committed to providing quality leadership, information, education, and technical assistance for the conservation and wise use of natural resources.

2) Financial: The District Board requests funding from County and State and Federal agencies. In handling these public funds, the District Board reviews sources of funding, develops budgets and sends budget reports to the ISWCC.

3) Public Outreach: The district continues assisting county and city officials with issues related to comprehensive planning for wise land use. We will also continue to work with groups and individuals to reduce and prevent pollutions of both surface and ground water.

4) The district currently publishes an informative newsletter each quarter and puts articles in the local newspaper. The district sponsors the conservation poster contest, speech contest, Soil & Water Stewardship Week/all year, and an Envirothon team. The district provides scholarship money for students to attend the Natural Resources Workshop. The district supports both the State and Local Land Judging Contest sponsored by the FFA Chapter.

5) Technical Assistance: Technical assistance is provided through the district partnership with NRCS, IASCD, and ISWCC. Canyon SCD has been able employ a Soil Conservation Technician since the first Conservation Technical Assistance (CTA) agreement which was originally signed in 2009. This agreement

has enabled Canyon SCD to continue to improve soil health and water quality through education and implementation of best management practices. Landowner, operators, public and students benefit by learning the importance of protecting our agricultural lands & natural resources.

D. Soil Resources

1) Present Condition and Trend: Most soils are of medium texture with good drainage and high inherent fertility and productive capacity. The general soil problems, usually confined to local areas include saline and alkaline conditions, sandy texture, steep slope, poor drainage, and shallow depth over gravel and hardpan.

2)Soil Erosion (IRRIGATION INDUCED EROSION): There are approximately 260,341 acres of irrigated cropland in Canyon County. Most of this area now has switched to sprinkler irrigation and drip systems because of conservation assistance. Surface irrigated lands generally have higher erosion rates and are of particular concern to water quality objectives. Substantial areas of Canyon County have excessive irrigation induced erosion. Over 100,000 acres of surface irrigated cropland in the county has been identified as having serious erosion. Primarily, this is surface irrigated cropland which has slopes greater than 1%. These acres do not occur in any location in the County. On some fields, surface soil horizons have been eroded away, and the subsurface horizons exposed.

3)Suspended sediment reduces water clarity, interferes with irrigation by decreasing pump life and increasing ditch cleaning costs, fills in reservoirs, and reduces habitat quality for fish and other aquatic life. The major nutrients associated with agricultural runoff are nitrogen and phosphorous, although through awareness has curbed some of the problem. In high concentrations, these nutrients stimulate excessive algae or aquatic plant growth that is thought may reduce oxygen to levels harmful to fish, and clog pipes and ditches.

4)Soil Survey Status: A soil survey of the district was published in 1972. Soils were grouped and classified according to depth, texture, slope, degree of drainage, limiting layers, etc. These groupings (soil series) have been grouped into eight General Soil Associations to show the pattern of soils for broad use planning (note soil association map). This was enhanced by district conservation staff member Keith Griswold early 2000 when he mapped the soil types.

SOIL SURVEY INTERPRETATIONS

An inventory of soil and water characteristics is a prerequisite to good land use planning. Whether the texture is sand or clay, level or steep, wet or dry, deep or shallow, saline or non-saline, determines the feasibility of crop production, sewage disposal, building and road construction and many other uses. In addition to agricultural uses, the soil survey interpretations are useful for planning and zoning commissions, engineers, land and tax appraisers, real estate developers, lending organizations and educators. Some uses of this interpretive information are for determining:

1. Suitability for industrial, business, residential and recreational sites.
2. Suitability for and effects on construction and maintenance of roads, airports, pipelines, building foundations, water storage facilities, water control structures, land drainage systems and sewage disposal systems.
3. Suitability as a source for topsoil, sand, and gravel, and for road and dam building material.
4. Soil related limitations and production potentials for cultivated crops, pasture, trees, and wildlife.

For soil association descriptions, please refer to the 1972 Canyon County Soil Survey available in the district office, contact the Canyon SCD Admin. Assist. or at the web soil survey @ http://websoilsurvey.nrcs.usda.gov.

E. Water Resources (Quantity)

1. Water Sources

Water continues to be an issue. The Basin Advisory Group (BAGS) has completed a Total Maximum Daily Load (TMDL) on the Boise and Snake Rivers. Conservation practices continue to be necessary to meet the goals to reduce nutrients and sediments. Assisting farmers and landowners continues to be the priority of the district. Rapid population growth has impacted the district with the loss of prime farmland. Impacts of new county ordinances on farming practices are a great concern.

2. Flooding and Drainage

Flooding is not a frequent problem in the county but when it does occur, the impacts can be serious.

Flooding occurs on an infrequent basis along most of the streams and draws in the County. It normally occurs in the late winter or early spring when the soil is frozen. Rain melts the snow cover which cannot soak into the frozen soil and rapid runoff occurs. Streams and draws overflow, eroding crop fields, damaging irrigation structures, and occasionally destroying county roads.

Drainage is no longer a major problem within the district. Most areas in need of drainage to improve crop production have been drained. Maintenance of the drainage systems is needed. The importance of wetlands to wildlife, and federal and state programs designed to protect wetlands will limit future drainage projects.

F. Surface Water

Snowfall on the Boise and Payette River's watersheds determine the adequacy of surface water. Upstream storage reservoirs were built for irrigation, provide flood control, and assure a regulated flow to meet peak irrigation demands. Organized irrigation districts manage the water on most of the irrigated land. Major irrigation districts are the Black Canyon, Wilder, Pioneer, Farmers Co-op, Riverside, Nampa - Meridian, and the Boise - Kuna.

G. Ground Water Quality

There are several hundred irrigation wells in the district providing both primary and supplemental irrigation water. The Idaho Department of Water Resources is responsible for permitting irrigation wells. Groundwater pollution is a major public concern. DEQ has a nitrate plan in place for Canyon County after a 2-year study and sampling of wells. A TMDL study for the Lower Boise River was completed in 2002, which reports on the causes of contamination in this area.

WATER QUALITY OFFICIAL STREAM SEGMENTS OF CONCERN

The following were segments of concern that were sampled and followed as part of the 303d listing. This list of impacts affecting these waters, have been reduced by several issues, awareness being number one. There will always be impacts of some form, but the result was lessening the known. 303d listed stream segments occur in the district. The 303d list changes with time. **The current list of impaired water bodies is included in IDEQs 2012 Integrated report which can be accessed at http://www.deq.idaho.gov/water/data.**

IMPACTED WATERS

The following stream segments are listed as impacted waters by the Idaho Department of Environmental Quality.

Snake River King Hill to Marsing--impacted by nutrients and pesticides from irrigated cropland.

Indian Creek from New York Canal to Boise River--impacted by nutrients, sediment, organic enrichment, and petroleum products from irrigated cropland, pastures, feedlots, construction, storm sewers and land disposal areas.

Boise River Star to Notus--impacted by nutrients, sediment and organic enrichment from irrigated cropland, pastureland, feedlots, construction, and hydrologic modification.

Mason Creek headwaters to Boise River--impacted by nutrients, sediment and organic enrichment from irrigated cropland, pastureland, and feedlots.

Boise River Notus to Snake River--impacted by nutrients, sediment, organic enrichment, and pathogens (bacteria) from irrigated cropland, pastureland, rangeland, feedlots, construction and hydrologic modification.

Sand Hollow Creek headwaters to Snake River--impacted by nutrients, sediment and organic enrichment from irrigated cropland and pastureland.

Snake River Boise River to Weiser River--impacted by nutrients and sediment from irrigated cropland and pastureland.

WATER QUALITY CONCERNS

Another water quality concerns in the county is Lake Lowell. This lake is recognized as one of the best bass fisheries in the state and was severely impacted from irrigation return flows.

WATER QUALITY STATEMENT

The Canyon Soil Conservation District willingly accepts the responsibility inherent to Districts to address agricultural nonpoint source pollution as set forth in Section 319 of the 1987 Water Quality Act; the Safe Drinking Water Act of 1986; and the Clean Water Act of 1972 Section 208. The Canyon Soil Conservation

District accepts this responsibility to preserve a locally administered voluntary approach for the control and abatement of agricultural nonpoint source pollution and to protect and enhance the quality and value of water resources of the State of Idaho.

H. Land Uses

1) Animal Waste Management: A permit system is managed by the U. S. Environmental Protection Agency for larger animal waste facilities. Most of the livestock operations in the county have adequate facilities for storing and spreading animal waste in a non-polluting manner.

2) Cropland

a. Irrigated--The current economic conditions dictate that Canyon County farm ground is intensively row cropped. The Canyon Soil Conservation District encourages the maintenance and improvement of the soil by controlling wind and water erosion. The district supplies information on best management practices to land users through the local news media, the district newsletter, and direct contact. More and more farmers are using conservation practices. These include such practices as sediment ponds, vegetative filter strips, straw mulching, conservation tillage, agro-tillage, and proper crop rotations. Many of the farmers have switched to surge, drip, and sprinkler irrigation.

b. Non-Irrigated--Dry cropland is essentially non-existent in Canyon County and is not recognized as a land use. Some irrigated croplands may be dry cropped occasionally due to a shortage of irrigation water.

3) Pasture and Alfalfa--Pasture and hay are soil conserving crops. The Canyon Soil Conservation District encourages the planting of hay and pasture on problem soils and slopes. One way they plan on doing this is through the media and District newsletter.

4) Rangeland-- is a minor land use in Canyon County. Rangeland is mainly used for spring and winter pastures.

5) Urban--The increase in business activities and the large increase in population of the district has resulted in conversion of many hundreds of acres from agricultural use to residential, commercial, and industrial uses. With the economic downturn virtually, all expansion has stopped, and our focus will be directed at keeping the agriculture viable with conservation practices.

The effects of changing from agricultural to urban use results in impacting of drainage water with industrial waste and sewage effluents. Runoff from large areas of concrete and paved areas need to be accommodated by the drainage systems.

The district will cooperate with city and county planning and zoning departments by providing soil survey and any other data available to help in an orderly transition of these land uses.

6) Water Resources--The conditions of water resources in Canyon County are generally good. The trend is more pressure from environmentalists and concerned citizens for cleaner water, both surface and ground water. Water resources are used for personal, business, irrigation and recreational uses. The Canyon Soil Conservation District will work with other agencies and groups concerned with improving water resources without undue pressure on the local economy.

7) Land Preservation--With the Conservation Security Program, the District is actively working to sign up landowners for the program to preserve our agricultural land.

8) Wetlands—In the last few years the district has sponsored wetland projects. One of the biggest is the CB Springs Ranch. The whole office has been evolved with the plantings and cleaning up the moss with barley straw. The exact number of wetlands on private land in the Canyon Soil Conservation District has not been determined yet. The bulk of obvious natural and artificial wetland areas are associated with the irrigation districts or the Upper Deer Flat Wildlife Refuge. It is difficult in this area to differentiate between artificial and natural wetlands due to the impact of irrigation and flood control structures.

9) Fish and Wildlife--The changing of land use from the early years of agriculture in Canyon County when a hay, grain, and livestock economy was predominant, to the present time of continuous row crop and limited livestock production, has resulted in a loss of habitat suitable for many species of wildlife. Fish life has suffered from an increased amount of silt from the clean-cropped fields and the nitrates, herbicides and pesticides present in runoff water. The SCD encourages and will assist land users in planning areas for use by wildlife. Our focus is generally in this area to add more wildlife reserves to the two we have already established.

Important needs are conservation practices which result in less loss of soil into the streams, reducing or eliminating runoff of chemicals and incorporating and retaining wildlife food and cover plots in

farm plans when feasible. The district does cooperate with Idaho Fish and Game, Federal Wildlife Refuge personnel and District Cooperators to further management of this resource.

The major problem with fisheries in the district is water quality. Degradation of water quality does reduce the opportunity for fishing in the district. Current trends are improving. Reducing sedimentation will continue to improve as more center pivots, wheel line and drip irrigation systems are introduced into farming practices.

Some wildlife populations are decreasing from natural predators and loss of wildlife habitat. The district is encouraging farmers to use practices that leave ground cover and settling ponds to increase wildlife habitat.

10) Recreation--With the growth in Idaho's population and the increase in the number of tourists to our state, there are definite needs for more recreational facilities and the up-grading of facilities we already have.

The trend has been for the state to cut funds for the maintenance of some camping areas. This money could easily be recovered from out of state tourist's spending money in our state if we had good recreation areas and adequate R.V. parking and camping facilities for them to use.

The Canyon SCD's goal is to assist the State and County Departments of Parks and Recreation, the Idaho Fish and Game Dept., the Forest Service and other related agencies in any way we are able to accomplish the above-mentioned
needs.

11) Riparian--The rivers, streams and waterways in the district have riparian areas that vary in quality. These areas are used mainly for livestock grazing and recreation. The Canyon SCD supervisors are willing to work with landowners and people interested in improving and maintaining the riparian areas.

12) Lake Lowell return flows back into Lake Lowell are a priority. There is a Total Maximum Daily Loads (TMDL's) Implementation Plan for the Boise River and Lake Lowell.

13) Woodlands--The only areas in the Canyon Soil Conservation District that could be called woodlands are in the Upper Deer Flat Wildlife Refuge and possibly along the Boise River.
There are other agencies that have control of those areas. The SCD does encourage the plantings of windbreaks for wind control and wildlife habitat improvements.

Whenever possible the Canyon Soil Conservation District will assist other agencies in these areas if help is requested.

SUMMARY: Canyon County Soil Conservation District will continue to assist NRCS staff
In Technical assistance in the field with Irrigation Design work. Co-op partnerships with joint ventures
Applying NRCS contracts alongside 319 Grant work in areas of need of soil and water conservation.
While reducing sediment loading along the Snake River Boise River Lake Lowell, and Tributaries.

Canyon County Soil Conservation District will continue to work closely with the Idaho
Soil and Water Conservation Commission with program development such as (WQPA) Water Quality
Program for Agriculture.

Canyon County Soil Conservation District will continue to work with the (TAC) Technical
Advisory Committee, and the (LBWC) Lower Boise River Watershed Council; to locate, develop,
design and implement projects within canyon county. These projects are used for State, and Federal
Grants that reduce sediment loading that effect the Tributaries of the Snake River system.

Canyon County Soil Conservation District will work with the Fresh Water Trust, and Idaho Power in
support of the Colombia basin EPA TMDL reduction in Mercury within the Snake River and its
tributaries within Canyon County

Canyon County Soil Conservation District will continue to implement its three No till Drills including the
Ada County Drill for an average of 1500 acres each year

Canyon County Soil Conservation District is and will participate in County and State Outreach programs.

Green House & (The New technology ,and interest in Vegetable Gardens and small acreage Farms . Canyon County Soil Conservation District is poised to help the Modern Farmer.

The Future of Idaho Farming is forever changing Canyon County Soil Conservation District is changing with the times. New Ideas to grow vegetables and flowers for resale.

(Brad Mcintyre Farm) Pasturing Chickens behind Cattle in an innovative way to graze and aerate,Fertilze, getting the most out of your pastures

Expires 10/22/2031

Brad McIntyre, guests and the mobile chicken coops.

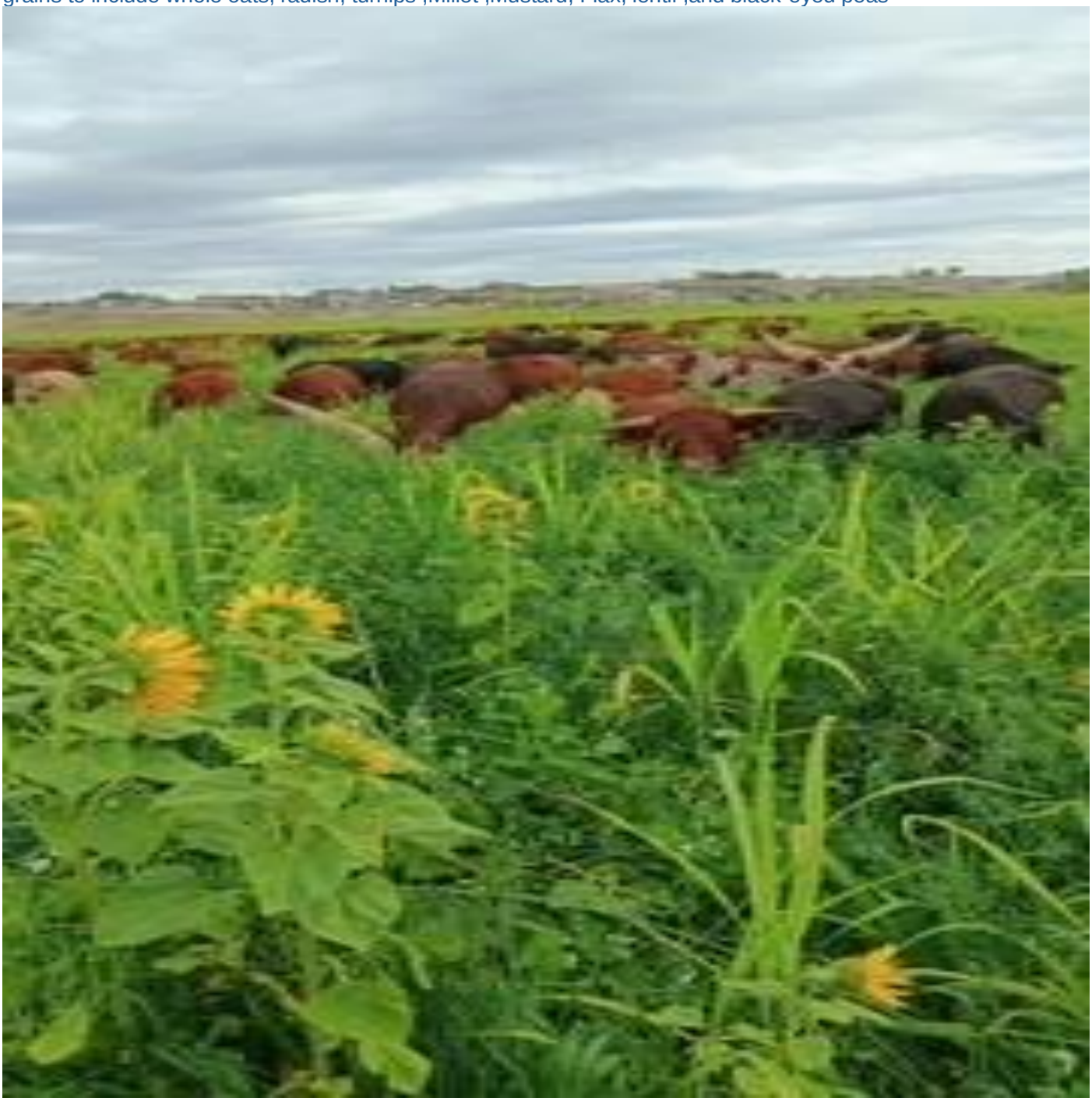
Treasure Valley Integrated Crop-Livestock System Field Day & Farm Tour

By Dr. Jemila Chellappa

On September 19, the Treasure Valley Field Day took place at McIntyre Farms in Caldwell, ID focused on advancing integrated crop-livestock systems in Idaho agriculture. The event attracted a diverse audience from Southern Idaho eager to explore innovative practices that align with sustainable farming principles. The day featured a combination of presentations and hands-on demonstrations, emphasizing the importance of integrating livestock as a vital fifth principle of soil health lead by Dr. Jemila Chellappa, Area Cropping System Educator, University of Idaho Extension, Southern Districts. Attendees had the opportunity to engage in three interactive sessions, each showcasing different aspects of the integrated system. One standout session was led by Brad McIntyre, Owner of McIntyre Farms who shared his journey of incorporating livestock into his crop rotation. Brad discussed the benefits of grazing cover crops, highlighting how it enhances soil health by improving organic matter and microbial activity. "By using livestock as a tool rather than just an endpoint, we can close the nutrient loop and improve soil structure," he remarked.

Another engaging presentation came from Dr. Udayakumar "Uday" Sekaran, Soil Fertility and Irrigation Specialist at Malheur Experiment Station, Oregon State University. Uday

Cattle grazing on a five to thirteen - way cover crop depending on formula. Using hairy veg, an assortment of grains to include whole oats, radish, turnips ,Millet ,Mustard, Flax, lentil ,and black-eyed peas



Chickens fallowing cattle Southeast of Marsing

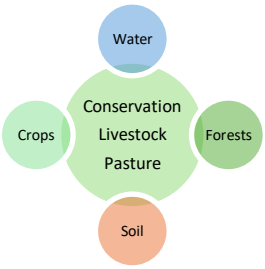
"Inner Peace can start with gratitude from a full belly of healthy food, an armful of flowers, or a mouth full of berries, grown honorably by many hands with deep respect for Mother Earth, from there radical magic is possible"

Peacefull Belly Farm(Truck Farm & Restaurant)Sunny Slope Caldwell Idaho

In the Plan for the 2025 Irrigation Season ,our budget for Canyon County Soil Conservation District will reduce on the average 2125 Tons of sediment and 4250 lbs. TP within the county boundaries .

We are on track for the next five years to reduce the sediment going into the tributaries of the Boise and Snake Rivers by 10,625 Tons and 21,250 lbs. of Total Phosphorus.

A reflection on where we are headed with Total Maximum Dailey Loads that EPA set for the State of Idaho for both the Snake River and its tributaries. The regulations had a reduction level to meet on the Lower Boise by 2070 at the rate of loading reductions we are seeing the past five-ten years we will meet the goal between 2025 and 2050.



CANYON SOIL CONSERVATION

DISTRICT

2208 E. CHICAGO, SUITE A

CALDWELL, ID 83605

ANNUAL RESOURCES CONSERVATION BUSINESS

PLAN

January 1, 2025 – December 31, 2025

FORWARD

The Canyon Soil Conservation District (Canyon SCD) is one of 50 Conservation Districts in Idaho. Idaho Soil and Water Conservation Districts are political subdivisions of state government but are not state agencies. Conservation Districts are charged with carrying out a program for the conservation, use and development of soil, water, and other natural resources.

Conservation Districts are the primary entities that aid private landowners and land users in the conservation, sustainment, improvement, and enhancement of the land. They are an entity for coordinating and implementing conservation programs, channeling expertise from all levels into action at the local level. Programs are non-regulatory; science-based technical assistance, incentive–based financial programs and informational and educational programs at the local level.

Both by legislation and by agreement, the USDA Natural Resources Conservation Service provides technical assistance to landowners and land users through Conservation Districts. Each Conservation District in Idaho has a signed Mutual Agreement with the Secretary of Agricultural and the Governor of Idaho that establishes a framework for cooperation.

This Annual Plan Resource Conservation Business Plan was developed not only to guide the Conservation District, but through the use of these abilities assist the landowners/users with the acceptable programs that will ensure a sustainable natural resource base for present and future generations in the Canyon Soil Conservation District.

This document identifies the resource needs in the Conservation District and presents a resource conservation action plan for meeting these needs.

CERTIFICATE OF ADOPTION

We, the Board of Supervisors of the Canyon Soil Conservation District this 6th day of March 2025 do hereby approve the following document known as the Resource Conservation Business Plan. This Plan will be in effect for a five-year period ending December 31, 2029, during which time it will be updated annually and/or amended, as necessary.

As evidence of our adoption and final approval, we do hereby affix our signatures to this document.

_____Clay Erskine, Chairman

_____Chris Gross, Vice Chairman

_____ Brad McIntyre Sec. /Treasurer

_____Alex Villifana, Supervisor

_____Tyson Meeks, Supervisor

_____Tate Walters
Treasure Valley High Desert Team Leader/District Conservationist

Table of Contents

I. Conservation District Structure and Governing Policies

A. Enabling Legislation, Legal Structure

The Canyon Soil Conservation District (Canyon SCD) is a legal subdivision of the State of Idaho deriving its authorities, powers and structure contained in Soil Conservation District Law, Title 22, Chapter 27, Idaho Code. The Canyon Soil Conservation District was formulated for the purpose of assisting landowners in conserving soil, in water resources and to effectively coordinate conservation activities within the District. This District may cooperate and enter into agreements with government agencies, private organizations, and with landowners for the purpose of conservation, development, wise uses and improvement of soil, water, and other natural resources within the boundaries of the district.

B. Powers and Authorities

The district and original program for the District was organized in 1951. The Canyon SCD focused on farm-related soil and water problems. Many farmers received help leveling their land, lining ditches, installing irrigation pipelines, developing conservation cropping systems, and learning to utilize crop residues for better soil and water conservation. Irrigation companies received help upgrading their canals and diversions and improving water-measuring devices along the Boise River.

The first supervisors to serve the Canyon County Soil Conservation District were Irvin Callahan 1951-1955, and Perry Christensen 1951-1954, both from Caldwell. Leon Henricks 1951-1957, Mark Terrel 1951-1952, and Jack Obermeyer 1951-1953, all from Middleton.

C. Current District Board & Associate Supervisors

BOARD MEMBERS - Jan/Feb 2025

Clay Erskin, Chris Gross, Brad McIntyre, Tyson Meeks, and Alex Villafana.

ASSOCIATE BOARD MEMBERS; Mike Swartz, Rex Runkle, Bob Mckellip & Rich Sims

D. District Administration and Operations

Canyon SCD programs are administered by a five-person board of supervisors elected by the citizens of Canyon County. Supervisors serve staggered four-year terms. There are currently four associate supervisors serving in advisory capacities. Regular meetings are held monthly, and special meetings are called as they are needed.

The district provides landowners and land users with a self-governing system enabling them to:

1) Cooperate in solving soil, water, and conservation issues.
2) Receive assistance from local, state, and federal agencies to address solving the soil, water and conservation issues.

The original program for the district was based on the needs and issues in 1951. The program was revised in 1969 to meet the identified needs at that time. Much of that program has been accomplished.

The Canyon Soil Conservation District advises and assists landowners and land users when plausible in the preparation and implementation of conservation plans. Emphasis is placed on improved soil and water techniques which will result in higher production, reduce soil erosion, and improve water quality.

The district will continue to be a resource to the county and city officials in areas of comprehensive planning for wise land use and will assist individuals and groups with educational information on soil conservations mission.

The district publishes an informative newsletter quarterly and has articles published in the local newspaper. The district sponsors the conservation poster contest, speech contest, and an Envirothon team. The district provides scholarship money for a student or students to attend the Natural Resources Workshop. The district supports both the State and Local Judging Contest sponsored by the FFA Chapter. District supports the State Envirothon.

The Canyon Soil Conservation District formed a partnership in 2009 with the Lower Boise Watershed Council (LBWC) by providing administration and technical assistance for the “Treasure Valley BMP Implementation 319 Project”.

Owners and operations of agricultural lands can apply for the 319-grant funding to implement conservation practices that protect and enhance water quality.

Water Quality Program Agriculture since 2022 when it was established Five projects have been developed and paid for under this program in Canyon County Total of $696,900 for gravity to sprinkler, Gravity to Drip and Irrigation Water control. Acres Treated 550 Averaging 1925 Tons of sediment and 3850 lbs. Phosphorus

.

BUBBLER SE PARMA 319 FUNNDING & WQPA

CENTER PIVOT DEIGN BY SCT Stan Haye for EQIP, WQPA & STATE 319 GRANT FUNDING 2023 $656,000.00 Project On Mason Creek 100 hp Pumping Plant on Mason Creek Slough WQPA was used too.

Drip Irrigation on Mint Farm SE WILDER 2024 WQPA Funding

<WQPA : DRIP IRRIGATION FILTRATION THREE SAND FILTER CONTAINMENT CYLINDERS >

Canyon SCD submitted a several 319 Sub State and Federal Grant proposals to the TAC and LBWC During the 2022- 2024 seasons with funding of said projects at $1,066,200.00 averaging 40% with producers 60% or $1,777,000.00Total of $2,843,200.00 that helped reduce the sediment loading on the Lower Boise River and Snake Rivers .Total Reductions during those periods were 5,667 Tons of Sediment and 11,334 lbs. of TP .

2022 – 2024 Five Water Quality Agriculture Programs were funded in Canyon County.
Conservation Technical Assistance (CTA) was provided to These producers on 450 acres .For Gravity to Drip Irrigation Gravity to Sprinkler and a structure for water control.

During that same time 4100 acres of No-Till Drill use from the Canyon Counties three Drills were accomplished making strides in Best Management Practices. Site visits, engineering designs, analysis, and recommendations for irrigation systems including improved gravity systems, sprinklers, drip, and POD systems

E. District Objectives

1. Develop and/or implement programs for better soils and water management using all available tools (Such as our three No Till Drills)
2. Emphasize programs which have enduring conservation benefits, production gains, include energy use, etc. EQIP ,NWQI NO TILL DRILLS . Small Farms Green Houses, Truck Gardens ,& new Grazing strategies.
3. Strong educational effort with: A-Cooperators of programs, B-Institutions public and private, C-General public County Commissioners to Emphasize the WQPA Program
4. Cooperate with NRCS, ISWCC, and DEQ in applying conservation programs Such as the 319 Grant Programs within the Lower Boise River and Snake Rivers
5. Lend assistance and work with agencies and units of government with whom we have memorandums of understanding Such as the Fresh Water Trust and Idaho Power
6. Support wildlife habitat establishment and maintenance of Stream Beds, bank work and sediment removal.
7. Provide Technical help on parks, greenbelts, nature trails, etc.

F. District Priorities

1. NRCS, ISWCC, and DEQ in applying conservation programs such as (EQIP) Environmental Quality Incentive Program, (NWQI) National Water Quality Incentive .(WQPA) Water Quality Program Agriculture.
2. Oversee 319 Grants Both State and Federal to seek out, design, and certify for payment New Applications for Gravity to Sprinkler Conversions, Gravity to Drip Irrigation. Bank Stablization for Rivers and Streams.
3. Small farm acreage support through Government Programs

G. District Boundaries

The boundaries of the district were originally drawn to include farmers and ranchers who wanted the services of a district and excluded those whose fear was an increase in taxes and government control over their land. The Canyon Soil Conservation District was organized in April 1951 and was comprised of the Second Unit of the Black Canyon Irrigation Project. The South Canyon SCD was organized in 1957 covering generally the southern half of Canyon County. In 1975 the South Canyon SCD and Canyon SCD were consolidated to form the present Canyon Soil Conservation District, which covers all of Canyon County with the exception of the corporate limits of Caldwell, Nampa, Parma, Notus, Middleton, Wilder, and Melba.

H. District Resources

1) Main Land Use

The original farmers of this county took desert sagebrush and developed the landscape into prime farmland and made it productive with the use of the irrigation infrastructure that gives Canyon County Idaho uniqueness. Prime farmland is identified as the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, seed, and oilseed crops. In general, prime farmlands have an adequate and dependable water supply, a favorable temperature and growing season, an acceptable pH, and few or no rocks. They are permeable to water and air, not excessively erodible, not saturated with water or subject to frequent flooding.

-

Canyon County has 277338 acres of Prime farmland, according to the 2022 census (see pages 13 & 14)

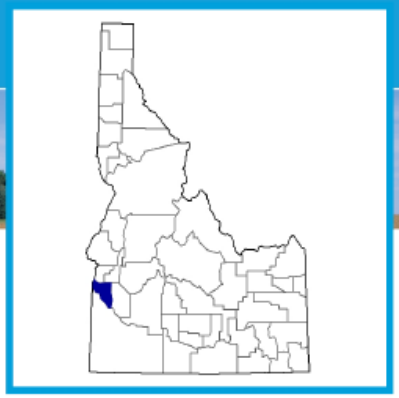
Unique farmland is land other than prime farmland that is used to produce specific high value food and fiber crops.

It has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality and/or high yields of a specific crop when treated and managed according to acceptable farming methods. Examples of such crops are fruit orchards, citrus groves, nut trees, olives, cranberries, and vegetables.

In 1978, public meetings were held to identify resource concerns in the county. Some of the land related problems identified during these meetings include the following:

1. The loss of prime farmland to other uses such as subdivisions, industrial and commercial developments.
2. Agricultural land should be taxed on its production capabilities, rather than its value for housing or other development.
3. Leased land farming--The renter is limited in making conservation decisions.
4. Trespassing--Hunting on private land with little or no regard for the owner's property.
5. Valuable topsoil is being lost, and the sediment is polluting streams.
6. The cost of implementing erosion control practices is high; the landowner is not benefiting financially in the short run.
7. Wind erosion is severe in some areas.(Stream Pollutants such as sediment in this picture)

2022 CENSUS OF AGRICULTURE *County Profile*



Canyon County
Idaho

Total and Per Farm Overview, 2022 and change since 2017

	2022	% change since 2017
Number of farms	2,311	+1
Land in farms (acres)	277,388	+1
Average size of farm (acres)	120	-0
Total	($)	
Market value of products sold	829,378,000	+44
Government payments	4,426,000	+80
Farm-related income	26,659,000	+18
Total farm production expenses	727,202,000	+39
Net cash farm income	133,261,000	+71
Per farm average	($)	
Market value of products sold	358,883	+43
Government payments [a]	46,585	+246
Farm-related income [a]	43,068	+23
Total farm production expenses	314,670	+38
Net cash farm income	57,664	+69

8 Percent of state agriculture sales

Share of Sales by Type (%)

Crops	55
Livestock, poultry, and products	45

Land in Farms by Use (acres)

Cropland	228,177
Pastureland	30,325
Woodland	1,061
Other	17,825

Acres irrigated: 207,577
75% of land in farms

Land Use Practices (% of farms)

No till	5
Reduced till	9
Intensive till	19
Cover crop	6

Farms by Value of Sales

	Number	Percent of Total [b]
Less than $2,500	942	41
$2,500 to $4,999	308	13
$5,000 to $9,999	279	12
$10,000 to $24,999	244	11
$25,000 to $49,999	118	5
$50,000 to $99,999	87	4
$100,000 or more	333	14

Farms by Size

	Number	Percent of Total [b]
1 to 9 acres	1,056	46
10 to 49 acres	789	34
50 to 179 acres	207	9
180 to 499 acres	122	5
500 to 999 acres	73	3
1,000+ acres	64	3

USDA
United States Department of Agriculture
National Agricultural Statistics Service
www.nass.usda.gov/AgCensus

2022 CENSUS OF AGRICULTURE *County Profile*

Market Value of Agricultural Products Sold

	Sales ($1,000)	Rank in State [c]	Counties Producing Item	Rank in U.S. [c]	Counties Producing Item
Total	**829,378**	**5**	**44**	**71**	**3,078**
Crops	**453,907**	**2**	**44**	**53**	**3,074**
Grains, oilseeds, dry beans, dry peas	98,426	4	42	634	2,917
Tobacco	-	-	-	-	267
Cotton and cottonseed	-	-	-	-	647
Vegetables, melons, potatoes, sweet potatoes	138,700	6	41	37	2,831
Fruits, tree nuts, berries	23,978	1	36	115	2,711
Nursery, greenhouse, floriculture, sod	16,199	1	42	206	2,660
Cultivated Christmas trees, short rotation woody crops	-	-	8	-	1,274
Other crops and hay	176,604	1	44	8	3,035
Livestock, poultry, and products	**375,471**	**6**	**44**	**125**	**3,076**
Poultry and eggs	2,801	3	44	727	3,027
Cattle and calves	82,217	8	44	168	3,047
Milk from cows	279,233	5	30	38	1,770
Hogs and pigs	(D)	(D)	40	(D)	2,814
Sheep, goats, wool, mohair, milk	3,764	3	44	38	2,967
Horses, ponies, mules, burros, donkeys	1,343	1	44	216	2,907
Aquaculture	(D)	7	21	(D)	1,190
Other animals and animal products	4,657	1	43	49	2,909

Producers [d]	**4,260**
Sex	
Male	2,513
Female	1,747
Age	
<35	411
35 – 64	2,591
65 and older	1,258
Race	
American Indian/Alaska Native	29
Asian	24
Black or African American	5
Native Hawaiian/Pacific Islander	4
White	4,163
More than one race	35
Other characteristics	
Hispanic, Latino, Spanish origin	193
With military service	395
New and beginning farmers	1,684

Percent of farms that:

Have internet access	**88**
Farm organically	**(Z)**
Sell directly to consumers	**9**
Hire farm labor	**19**
Are family farms	**96**

Top Crops in Acres [e]

Forage (hay/haylage), all	47,739
Wheat for grain, all	38,781
Corn for grain	23,758
Corn for silage/greenchop	23,669
Vegetables harvested, all	22,531

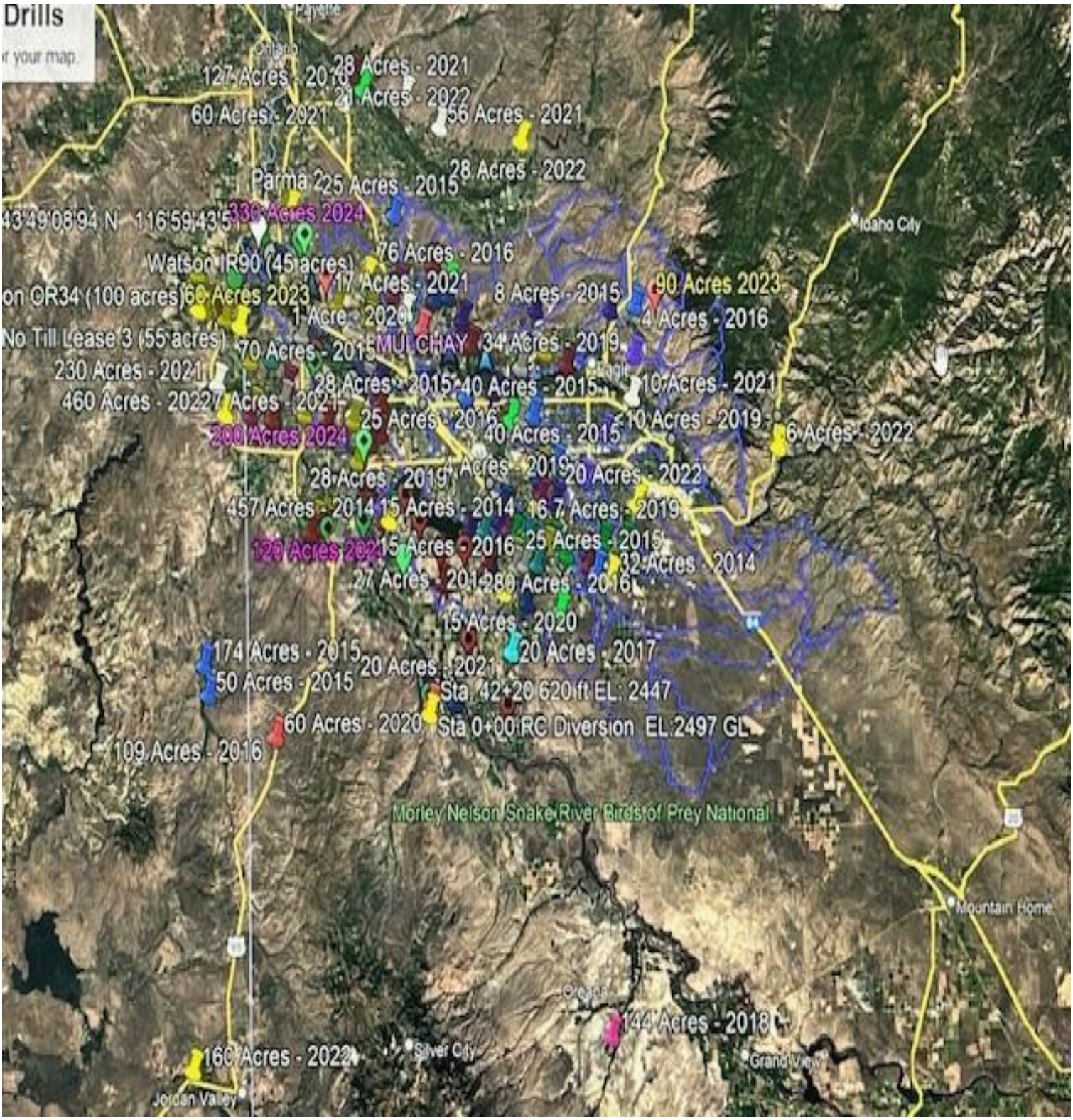
Livestock Inventory (Dec 31, 2022)

Broilers and other meat-type chickens	2,056
Cattle and calves	139,467
Goats	3,003
Hogs and pigs	1,206
Horses and ponies	3,664
Layers	31,361
Pullets	982
Sheep and lambs	15,767
Turkeys	3,059

[a] Average per farm receiving. [b] May not add to 100% due to rounding. [c] Among counties whose rank can be displayed. [d] Data collected for a maximum of four producers per farm. [e] Crop commodity names may be shortened; see full names at www.nass.usda.gov/go/cropnames.pdf. [f] Position below the line does not indicate rank. (D) Withheld to avoid disclosing data for individual operations. (NA) Not available. (Z) Less than half of the unit shown. (-) Represents zero.

In June 2020, Canyon SCD purchased a NO-Till Drill for landowner/operators to rent during the planting season. Acquiring the ADA County 15 ft No Till Drill and In February 2024, Canyon County SCD Purchased a 6ft Drill for small scale farms.

Now Average acres treated are about 1500.



From Wiser, to Jordan Valley , Onterio to Grandview


1206NT

1) Soil Health is a major concern with Canyon SCD. The Canyon SCD is educating landowners, public and the students of the importance of Soil Health. Cover crops, No-Till, Strip Till farming, and Best Management Practices are ways that helps the total soil health.

2) Soil Resources

Canyon County, with an area of 587.37 (in 2010) square miles of land, includes generally level, rolling, and bench terrain which rise from elevations of 2200 feet along the Snake River to 2800 feet in the Black Canyon area in the northeast corner of the county. The Boise River flows across the center of the district from east to west. The Snake River forms the west and south boundaries. Other perennial streams are Indian Creek, Five Mile, Sand Hollow and Willow Creek.

The County has a complex geologic history involving volcanic activity interspersed with the action of local rivers and torrential floods of glacial origin. Surface materials consist of alluvial deposits along the Snake and the Boise rivers and tributaries. Elsewhere terrace gravels predominate with occasional basalts which are exposed as prominent landmarks in isolated places.

3) Climate

Based upon a 35+year record at the nearby Boise Airport, Canyon County has a dry temperate climate of cool wet winters and warm dry summers. Temperatures during the day may fluctuate widely. In the summer, hot periods range from a few days in length to several weeks long. In winter, cold spells will range from a few days to several weeks long. The main annual temperature is 51 degrees F with main monthly temperatures of 29 degrees F in January and 75 degrees F in July. Extremes of 107 degrees F and -30 degrees F have been recorded. The average dates of killing frosts are May 7th and October 3rd, allowing an average frost-free period of 150 days. Southeast winds predominate with an average of 9 miles per hour. Relative humidity averages about 58 percent. The annual precipitation varies from 6.5 to 11.7 inches with most of it falling as rain or snow in the winter months. The high percentage of cloudless days combined with the control of moisture, makes Canyon County one of the most productive agricultural counties in the Nation with high crop diversity and intensive farming methods.

I. Cooperating Conservation Partners

The Canyon Soil Conservation District is one of 50 Districts in Idaho who works in a partnership with the Idaho Soil and Water Conservation Commission and with the Idaho Association of Conservation Districts. The USDA Natural Resources Conservation Service provides technical assistance to the landowner, creating their conservation plans and helping them to deal with their conservation resource problems.

J. COOPERATING AGENCIES

Bureau of Land Management	208-384-3300
Canyon County Commissioners	208-454-7507
Caldwell Chamber of Commerce	208-459-7493
Canyon Extension Service	208-459-6003
Canyon Planner	208-454-7340
Environmental Protection Agency	208-378-5743
Idaho Association of Soil Conservation District	208-895-8928
Idaho Department of Water Resources	208-287-4800
Idaho Division of Environmental Quality	208-373-0464
Idaho Fish and Game	208-465-8465
Idaho Soil & Water Conservation Commission	208-332-1790
Idaho State Department of Agriculture	208-332-8503
National Fish & Wildlife Deer Flat Refuge	208-467-9278
Natural Resources Conservation Service	208-779-3447
USDA Farm Service Agency	208-779-3430

II. Resource Conditions, Trends and Conservation Needs

A. Population

The population of Canyon County referenced from the Canyon County Workforce Trends; July 2024 266,892 residents. The population grew 35,776 or 13 % since April of 2020. Growth remains robust over the past year posting a 3.1 percent gain, the highest since 3 percent in 2008. Nampa's population 114,268 up from 93,590, in 2017. a 19 percent increase from 2017.

Caldwell had a 26 percent increase to 73,466 2025 up from 54,660. Middleton with a population of 11,016 is up from 7,439 growth at 33 percent. The population increase is in non-agricultural occupations. The number of full-time farmers is dropping with a shift to more part-time farmers who earn a substantial part of their income from off-farm activities.

Canyon County's total employment rose from **27,175** in 1969 to **123,935** in 2025, for a net gain of **98,760**, or **456%**.

	2024	2020
Total covered employment	85,398	68,046
Agriculture	3,400	3,400
Mining & Natural Recourses	3,274	41
Construction	10,696	6,568
Manufacturing	11,053	10,468
Trade, Utilities & Transportation	20,091	13,235
Information	537	675
Financial Activities	2,045	1,806
Professional & Business Services	7,143	5,184
Educational & Health Services	17,841	9,281
Leisure & Hospitality	7,452	6,078
Other Services	2,192	1,797
Government	?	9,515

B. Agricultural Economy

In 2017, there were approximately 2,289 farm operating units in the district with an average size of about 120 acres, with the total number of acres being, 274,952. Major crop enterprises include:

1. General row crops such as sugar beets, potatoes, field corn, small grain, onions etc. Highly specialized crops include mint and hops.
2. Commercial seed crops include a wide variety of vegetable seeds including alfalfa and clover seed.
3. A wide variety of fruit orchards and vineyards (wine grapes).
4. Forage crops include alfalfa and grass hays, corn ensilage and tame pasture.
5. Commercial Nurseries

Major livestock enterprises include:

1. Dairy
2. Beef
3. Sheep
4. Hogs
5. Some poultry

The district consists of moderately large dairy operations, as well beef, sheep, and hog operations dispersed throughout the county. The larger operations are primarily confinement type feedlots while the small beef, sheep and hog operations usually utilize pastures.

The trend continued until recently toward fewer and larger farms; however, according to the latest USDA reports a return of many smaller operations is a focus. The number of dairy operations continued to

decline but has now stabilized. The rapid growth threatened the stability of Canyon County agriculture until the 2008 financial decline. Canyon County still ranks high in the nation in the production of alfalfa seed and sweet corn seed.

Some of the major problems facing the crop and livestock producers include the following:

1. Production costs and equitable returns
2. The availability of dependable labor.
3. Regulations (animal waste, sediment, chemicals etc.).
4. Markets for products, crops, and animals such as sheep and hogs.
5. Soil problems-resurfacing lava rock, low organic soils.
6. Water storage.
7. The Economic downturn.
8. Availability of fuel.
9. Disease control, interstate transfer of livestock.
10. High interest rates and ability to borrow money.
11. Loss of Agriculture related businesses (seed companies, implement dealer's slaughterhouse, etc.)

There are approximately 9,258 acres of rangeland in the district. The rangeland consists largely of annual grass and scattered sagebrush- type range. Most of the original bunchgrass has disappeared through mismanagement. Low rainfall makes re-seeding to improved perennial type grasses difficult. Some of the private range is being converted to cropland by irrigation developments; there is also considerable residential development on these lands.

Agri-business operations make up a large part of the economy. Without these businesses, agriculture - as we know it today - would be impossible. Included are plants for processing dairy products, potatoes, sugar beets, hops, mint, and corn; also, facilities for packaging and transporting fruit, vegetables, and other farm produce. Seed companies have facilities for processing the large volume of seed crops produced. There are also farm and irrigation equipment manufacturers and dealers, feed processing plants, seed, fuel, and chemical supplies. There are many financial institutions to handle agriculture's financial needs.

C. District Operations

1) Administration: The focus of the Canyon Soil Conservation District was to assist in every way possible to help with ideas and practices that best suited the needs of the cooperator and the lay of the land for the erosion of soil and preservation of water and other necessary natural resources. We would accomplish this by making available, whatever the source, educational resources (some of our knowledge of years of experience), financial (whenever it would fit a practice) and cooperating with the Districts NRCS Conservationist to assist the needs of the local landowner/manager with conservation of their soil and water. Emphasis has always been placed on improved soil and water management techniques which will result in higher production, reduced soil erosion, improved water quality. Our mission was committed to providing quality leadership, information, education, and technical assistance for the conservation and wise use of natural resources.

2) Financial: The District Board requests funding from County and State and Federal agencies. In handling these public funds, the District Board reviews sources of funding, develops budgets and sends budget reports to the ISWCC.

3) Public Outreach: The district continues assisting county and city officials with issues related to comprehensive planning for wise land use. We will also continue to work with groups and individuals to reduce and prevent pollutions of both surface and ground water.

4) The district currently publishes an informative newsletter each quarter and puts articles in the local newspaper. The district sponsors the conservation poster contest, speech contest, Soil & Water Stewardship Week/all year, and an Envirothon team. The district provides scholarship money for students to attend the Natural Resources Workshop. The district supports both the State and Local Land Judging Contest sponsored by the FFA Chapter.

5) Technical Assistance: Technical assistance is provided through the district partnership with NRCS,

IASCD, and ISWCC. Canyon SCD has been able employ a Soil Conservation Technician since the first Conservation Technical Assistance (CTA) agreement which was originally signed in 2009. This agreement has enabled Canyon SCD to continue to improve soil health and water quality through education and implementation of best management practices. Landowner, operators, public and students benefit by learning the importance of protecting our agricultural lands & natural resources.

D. Soil Resources

1) Present Condition and Trend: Most soils are of medium texture with good drainage and high inherent fertility and productive capacity. The general soil problems, usually confined to local areas include saline and alkaline conditions, sandy texture, steep slope, poor drainage, and shallow depth over gravel and hardpan.

2)Soil Erosion (IRRIGATION INDUCED EROSION): There are approximately 260,341 acres of irrigated cropland in Canyon County. Most of this area now has switched to sprinkler irrigation and drip systems because of conservation assistance. Surface irrigated lands generally have higher erosion rates and are of particular concern to water quality objectives. Substantial areas of Canyon County have excessive irrigation induced erosion. Over 100,000 acres of surface irrigated cropland in the county has been identified as having serious erosion. Primarily, this is surface irrigated cropland which has slopes greater than 1%. These acres do not occur in any location in the County. On some fields, surface soil horizons have been eroded away, and the subsurface horizons exposed.

3)Suspended sediment reduces water clarity, interferes with irrigation by decreasing pump life and increasing ditch cleaning costs, fills in reservoirs, and reduces habitat quality for fish and other aquatic life. The major nutrients associated with agricultural runoff are nitrogen and phosphorous, although through awareness has curbed some of the problem. In high concentrations, these nutrients stimulate excessive algae or aquatic plant growth that is thought may reduce oxygen to levels harmful to fish, and clog pipes and ditches.

4)Soil Survey Status: A soil survey of the district was published in 1972. Soils were grouped and classified according to depth, texture, slope, degree of drainage, limiting layers, etc. These groupings (soil series) have been grouped into eight General Soil Associations to show the pattern of soils for broad use planning (note soil association map). This was enhanced by district conservation staff member Keith Griswold early 2000 when he mapped the soil types.

SOIL SURVEY INTERPRETATIONS

An inventory of soil and water characteristics is a prerequisite to good land use planning. Whether the texture is sand or clay, level or steep, wet or dry, deep or shallow, saline or non-saline, determines the feasibility of crop production, sewage disposal, building and road construction and many other uses. In addition to agricultural uses, the soil survey interpretations are useful for planning and zoning commissions, engineers, land and tax appraisers, real estate developers, lending organizations and educators. Some uses of this interpretive information are for determining:

1. Suitability for industrial, business, residential and recreational sites.
2. Suitability for and effects on construction and maintenance of roads, airports, pipelines, building foundations, water storage facilities, water control structures, land drainage systems and sewage disposal systems.
3. Suitability as a source for topsoil, sand, and gravel, and for road and dam building material.
4. Soil related limitations and production potentials for cultivated crops, pasture, trees, and wildlife.

For soil association descriptions, please refer to the 1972 Canyon County Soil Survey available in the district office, contact the Canyon SCD Admin. Assist. or at the web soil survey @ http://websoilsurvey.nrcs.usda.gov.

E. Water Resources (Quantity)

1. Water Sources

Water continues to be an issue. The Basin Advisory Group (BAGS) has completed a Total Maximum Daily Load (TMDL) on the Boise and Snake Rivers. Conservation practices continue to be necessary to meet the goals to reduce nutrients and sediments. Assisting farmers and landowners continues to be the priority of the district. Rapid population growth has impacted the district with the loss of prime farmland. Impacts of new county ordinances on farming practices are a great concern.

2. Flooding and Drainage

Flooding is not a frequent problem in the county but when it does occur, the impacts can be serious. Flooding occurs on an infrequent basis along most of the streams and draws in the County. It normally occurs in the late winter or early spring when the soil is frozen. Rain melts the snow cover which cannot soak into the frozen soil and rapid runoff occurs. Streams and draws overflow, eroding crop fields, damaging irrigation structures, and occasionally destroying county roads.

Drainage is no longer a major problem within the district. Most areas in need of drainage to improve crop production have been drained. Maintenance of the drainage systems is needed. The importance of wetlands to wildlife, and federal and state programs designed to protect wetlands will limit future drainage projects.

F. Surface Water

Snowfall on the Boise and Payette River's watersheds determine the adequacy of surface water. Upstream storage reservoirs were built for irrigation, provide flood control, and assure a regulated flow to meet peak irrigation demands. Organized irrigation districts manage the water on most of the irrigated land. Major irrigation districts are the Black Canyon, Wilder, Pioneer, Farmers Co-op, Riverside, Nampa - Meridian, and the Boise - Kuna.

G. Ground Water Quality

There are several hundred irrigation wells in the district providing both primary and supplemental irrigation water. The Idaho Department of Water Resources is responsible for permitting irrigation wells. Groundwater pollution is a major public concern. DEQ has a nitrate plan in place for Canyon County after a 2-year study and sampling of wells. A TMDL study for the Lower Boise River was completed in 2002, which reports on the causes of contamination in this area.

WATER QUALITY OFFICIAL STREAM SEGMENTS OF CONCERN

The following were segments of concern that were sampled and followed as part of the 303d listing. This list of impacts affecting these waters, have been reduced by several issues, awareness being number one. There will always be impacts of some form, but the result was lessening the known. 303d listed stream segments occur in the district. The 303d list changes with time. **The current list of impaired water bodies is included in IDEQs 2012 Integrated report which can be accessed at http://www.deq.idaho.gov/water/data.**

IMPACTED WATERS

The following stream segments are listed as impacted waters by the Idaho Department of Environmental Quality.

Snake River King Hill to Marsing--impacted by nutrients and pesticides from irrigated cropland.

Indian Creek from New York Canal to Boise River--impacted by nutrients, sediment, organic enrichment, and petroleum products from irrigated cropland, pastures, feedlots, construction, storm sewers and land disposal areas.

Boise River Star to Notus--impacted by nutrients, sediment and organic enrichment from irrigated cropland, pastureland, feedlots, construction, and hydrologic modification.

Mason Creek headwaters to Boise River--impacted by nutrients, sediment and organic enrichment from irrigated cropland, pastureland, and feedlots.

Boise River Notus to Snake River--impacted by nutrients, sediment, organic enrichment, and pathogens (bacteria) from irrigated cropland, pastureland, rangeland, feedlots, construction and hydrologic modification.

Sand Hollow Creek headwaters to Snake River--impacted by nutrients, sediment and organic enrichment from irrigated cropland and pastureland.

Snake River Boise River to Weiser River--impacted by nutrients and sediment from irrigated cropland and pastureland.

WATER QUALITY CONCERNS

Another water quality concerns in the county is Lake Lowell. This lake is recognized as one of the best bass fisheries in the state and was severely impacted from irrigation return flows.

WATER QUALITY STATEMENT

The Canyon Soil Conservation District willingly accepts the responsibility inherent to Districts to address

agricultural nonpoint source pollution as set forth in Section 319 of the 1987 Water Quality Act; the Safe Drinking Water Act of 1986; and the Clean Water Act of 1972 Section 208. The Canyon Soil Conservation District accepts this responsibility to preserve a locally administered voluntary approach for the control and abatement of agricultural nonpoint source pollution and to protect and enhance the quality and value of water resources of the State of Idaho.

H. Land Uses

1) Animal Waste Management: A permit system is managed by the U. S. Environmental Protection Agency for larger animal waste facilities. Most of the livestock operations in the county have adequate facilities for storing and spreading animal waste in a non-polluting manner.

2) Cropland

a. Irrigated--The current economic conditions dictate that Canyon County farm ground is intensively row cropped. The Canyon Soil Conservation District encourages the maintenance and improvement of the soil by controlling wind and water erosion. The district supplies information on best management practices to land users through the local news media, the district newsletter, and direct contact. More and more farmers are using conservation practices. These include such practices as sediment ponds, vegetative filter strips, straw mulching, conservation tillage, agro-tillage, and proper crop rotations. Many of the farmers have switched to surge, drip, and sprinkler irrigation.

b. Non-Irrigated--Dry cropland is essentially non-existent in Canyon County and is not recognized as a land use. Some irrigated croplands may be dry cropped occasionally due to a shortage of irrigation water.

3) Pasture and Alfalfa--Pasture and hay are soil conserving crops. The Canyon Soil Conservation District encourages the planting of hay and pasture on problem soils and slopes. One way they plan on doing this is through the media and District newsletter.

4) Rangeland-- is a minor land use in Canyon County. Rangeland is mainly used for spring and winter pastures.

5) Urban--The increase in business activities and the large increase in population of the district has resulted in conversion of many hundreds of acres from agricultural use to residential, commercial, and industrial uses. With the economic downturn virtually, all expansion has stopped, and our focus will be directed at keeping the agriculture viable with conservation practices.

The effects of changing from agricultural to urban use results in impacting of drainage water with industrial waste and sewage effluents. Runoff from large areas of concrete and paved areas need to be accommodated by the drainage systems.

The district will cooperate with city and county planning and zoning departments by providing soil survey and any other data available to help in an orderly transition of these land uses.

6) Water Resources--The conditions of water resources in Canyon County are generally good. The trend is more pressure from environmentalists and concerned citizens for cleaner water, both surface and ground water. Water resources are used for personal, business, irrigation and recreational uses. The Canyon Soil Conservation District will work with other agencies and groups concerned with improving water resources without undue pressure on the local economy.

7) Land Preservation--With the Conservation Security Program, the District is actively working to sign up landowners for the program to preserve our agricultural land.

8) Wetlands—In the last few years the district has sponsored wetland projects. One of the biggest is the CB Springs Ranch. The whole office has been evolved with the plantings and cleaning up the moss with barley straw. The exact number of wetlands on private land in the Canyon Soil Conservation District has not been determined yet. The bulk of obvious natural and artificial wetland areas are associated with the irrigation districts or the Upper Deer Flat Wildlife Refuge. It is difficult in this area to differentiate between artificial and natural wetlands due to the impact of irrigation and flood control structures.

9) Fish and Wildlife--The changing of land use from the early years of agriculture in Canyon County when a hay, grain, and livestock economy was predominant, to the present time of continuous row crop and limited livestock production, has resulted in a loss of habitat suitable for many species of wildlife. Fish life has suffered from an increased amount of silt from the clean-cropped fields and the nitrates, herbicides and pesticides present in runoff water. The SCD encourages and will assist land users in planning areas for use by wildlife. Our focus is generally in this area to add more wildlife reserves to the two we have already established.

Important needs are conservation practices which result in less loss of soil into the streams, reducing or eliminating runoff of chemicals and incorporating and retaining wildlife food and cover plots in farm plans when feasible. The district does cooperate with Idaho Fish and Game, Federal Wildlife Refuge personnel and District Cooperators to further management of this resource.

The major problem with fisheries in the district is water quality. Degradation of water quality does reduce the opportunity for fishing in the district. Current trends are improving. Reducing sedimentation will continue to improve as more center pivots, wheel line and drip irrigation systems are introduced into farming practices.

Some wildlife populations are decreasing from natural predators and loss of wildlife habitat. The district is encouraging farmers to use practices that leave ground cover and settling ponds to increase wildlife habitat.

10) Recreation--With the growth in Idaho's population and the increase in the number of tourists to our state, there are definite needs for more recreational facilities and the up-grading of facilities we already have.

The trend has been for the state to cut funds for the maintenance of some camping areas. This money could easily be recovered from out of state tourist's spending money in our state if we had good recreation areas and adequate R.V. parking and camping facilities for them to use.

The Canyon SCD's goal is to assist the State and County Departments of Parks and Recreation, the Idaho Fish and Game Dept., the Forest Service and other related agencies in any way we are able to accomplish the above-mentioned
needs.

11) Riparian--The rivers, streams and waterways in the district have riparian areas that vary in quality. These areas are used mainly for livestock grazing and recreation. The Canyon SCD supervisors are willing to work with landowners and people interested in improving and maintaining the riparian areas.

12) Lake Lowell return flows back into Lake Lowell are a priority. There is a Total Maximum Daily Loads (TMDL's) Implementation Plan for the Boise River and Lake Lowell.

13) Woodlands--The only areas in the Canyon Soil Conservation District that could be called woodlands are in the Upper Deer Flat Wildlife Refuge and possibly along the Boise River.
There are other agencies that have control of those areas. The SCD does encourage the plantings of windbreaks for wind control and wildlife habitat improvements.

Whenever possible the Canyon Soil Conservation District will assist other agencies in these areas if help is requested.

SUMMARY: Canyon County Soil Conservation District will continue to assist NRCS staff
In Technical assistance in the field with Irrigation Design work. Co-op partnerships with joint ventures
Applying NRCS contracts alongside 319 Grant work in areas of need of soil and water conservation.
While reducing sediment loading along the Snake River Boise River Lake Lowell, and Tributaries.

Canyon County Soil Conservation District will continue to work closely with the Idaho
Soil and Water Conservation Commission with program development such as (WQPA) Water Quality
Program for Agriculture.

Canyon County Soil Conservation District will continue to work with the (TAC) Technical
Advisory Committee, and the (LBWC) Lower Boise River Watershed Council; to locate, develop,
design and implement projects within canyon county. These projects are used for State, and Federal
Grants that reduce sediment loading that effect the Tributaries of the Snake River system.

Canyon County Soil Conservation District will work with the Fresh Water Trust, and Idaho Power in
support of the Colombia basin EPA TMDL reduction in Mercury within the Snake River and its
tributaries within Canyon County

Canyon County Soil Conservation District will continue to implement its three No till Drills including the
Ada County Drill for an average of 1500 acres each year

Canyon County Soil Conservation District is and will participate in County and State Outreach programs.

Green House & (The New technology ,and interest in Vegetable Gardens and small acreage Farms . Canyon County Soil Conservation District is poised to help the Modern Farmer.

The Future of Idaho Farming is forever changing Canyon County Soil Conservation District is changing with the times. New Ideas to grow vegetables and flowers for resale.

(Brad Mcintyre Farm) Pasturing Chickens behind Cattle in an innovative way to graze and aerate,Fertilze, getting the most out of your pastures

Expires 10/22/2031

Brad McIntyre, guests and the mobile chicken coops.

Treasure Valley Integrated Crop-Livestock System Field Day & Farm Tour

By Dr. Jemila Chellappa

On September 19, the Treasure Valley Field Day took place at McIntyre Farms in Caldwell, ID focused on advancing integrated crop-livestock systems in Idaho agriculture. The event attracted a diverse audience from Southern Idaho eager to explore innovative practices that align with sustainable farming principles. The day featured a combination of presentations and hands-on demonstrations, emphasizing the importance of integrating livestock as a vital fifth principle of soil health lead by Dr. Jemila Chellappa, Area Cropping System Educator, University of Idaho Extension, Southern Districts. Attendees had the opportunity to engage in three interactive sessions, each showcasing different aspects of the integrated system. One standout session was led by Brad McIntyre, Owner of McIntyre Farms who shared his journey of incorporating livestock into his crop rotation. Brad discussed the benefits of grazing cover crops, highlighting how it enhances soil health by improving organic matter and microbial activity. "By using livestock as a tool rather than just an endpoint, we can close the nutrient loop and improve soil structure," he remarked.

Another engaging presentation came from Dr. Udayakumar "Uday" Sekaran, Soil Fertility and Irrigation Specialist at Malheur Experiment Station, Oregon State University. Uday

Cattle grazing on a five to thirteen - way cover crop depending on formula. Using hairy veg, an assortment of grains to include whole oats, radish, turnips ,Millet ,Mustard, Flax, lentil ,and black-eyed peas.

Chickens fallowing cattle Southeast of Marsing

"Inner Peace can start with gratitude from a full belly of healthy food, an armful of flowers, or a mouth full of berries, grown honorably by many hands with deep respect for Mother Earth, from there radical magic is possible"

Peacefull Belly Farm(Truck Farm & Restaurant)Sunny Slope Caldwell Idaho

Education At the Capitol Building

FY2025 (7 /1/24 - 6/30/25) Annual Plan of Work Canyon Soil Conservation District

Conservation District Priority #1 **Continue Partnerships with NRCS,LBWC, TAC, TFWT, Idaho Power**

Conservation District Priority # 2 Continue **using the Three No Till Drills**

Conservation District Priority #3 **Information & Education Objective: Increase public awareness of farmer stewardship of the land.**

In the Plan for the 2025 Irrigation Season ,our budget for Canyon County Soil Conservation District will reduce on the average 2125 Tons of sediment and 4250 lbs. TP within the county boundaries .

We are on track for the next five years to reduce the sediment going into the tributaries of the Boise and Snake Rivers by 10,625 Tons and 21,250 lbs. of Total Phosphorus.

A reflection on where we are headed with Total Maximum Dailey Loads that EPA set for the State of Idaho for both the Snake River and its tributaries. The regulations had a reduction level to meet on the Lower Boise by 2070 at the rate of loading reductions we are seeing the past five-ten years we will meet the goal between 2025 and 2050.

CERTIFICATE OF ADOPTION

We, the Board of Supervisors of the Canyon Soil Conservation District this 6th day of March 2025 do hereby approve the following document known as the Resource Conservation Business Plan. This Plan will be in effect for a five-year period ending December 31, 2029, during which time it will be updated annually and/or amended, as necessary.

As evidence of our adoption and final approval, we do hereby affix our signatures to this document.

Clay Erskine, Chairman

Chris Gross, Vice Chairman

Brad McIntyre Sec. /Treasurer

Alex Villifana, Supervisor

Tyson Meeks, Supervisor

Tate Walters
Treasure Valley High Desert Team Leader/District Conservationist

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IDAHO SOIL & WATER CONSERVATION COMMISSION

FIVE-YEAR (5) PLAN and ANNUAL WORK PLAN CERTIFICATION

DISTRICT: Canyon County SCD

FOR FISCAL YEAR: 2025

DUE : **March 01,** 3/20/25

CERTIFICATION

On behalf of my local Board of Supervisors, I hereby certify that the attached Five-Year (5) Plan and Annual Work Plan is true and accurate, and further submit said Plan for the above named District and fiscal year.

A copy of this Five-Year (5) Plan and Annual Work Plan shall be kept at the District office and is available for public inspection.

_____

Board Supervisor Signature

Clay Erskine

Printed Name

Clay Erskine

Date

3/6/2025

District Telephone

208-731-9930

District Email Address

FOR SWC USE ONLY:

DATE OF CONFIRMATION: _____