IDAHO SOIL & WATER CONSERVATION COMMISSION

REGULAR MEETING NOTICE & AGENDA

Idaho Soil & Water Conservation Commission
April 12, 2018, 10:00 a.m. to 4:00 p.m. MT

Location: Idaho Water Center, 322 E Front St, Suite 560, Conference Room, Boise
TELECONFERENCE # 1-877-820-7831 Passcode: 922837

The Commission will occasionally convene in Executive Session, pursuant to Idaho Code § 74-206(1).
Executive Session is closed to the public.

AMERICANS WITH DISABILITIES ACT COMPLIANCE

The meeting will be held in facilities that meet the accessibility requirements of the Americans with Disabilities Act. If you require special accommodations to attend, participate in, or understand the meeting, please contact the Idaho Soil & Water Conservation Commission at (208) 332-1790 or Info@swc.idaho.gov so advance arrangements can be made.

Members of the public may address any item on the Agenda during consideration of that item. Those wishing to comment on any agenda item are requested to so indicate on the sign-in sheet in advance. Copies of agenda items, staff reports and/or written documentation relating to items of business on the agenda are on file in the office of the Idaho Soil & Water Conservation Commission in Boise. Upon request, copies can be emailed and will also be available for review at the meeting.

	1.	**WELCOME, SELF-INTRODUCTIONS, AND ROLL CALL**	Chairman Wright
	2.	**AGENDA REVIEW** *The Agenda may be amended after the start of the meeting upon a motion that states the reason for the amendment and the good faith reason the item was not included in the original agenda.*	Chairman Wright
	3.	**PARTNER REPORTS**	
	4.	**ADMINISTRATION**	
*#	a.	Minutes 1. February 19, 2018 ACTION: Approve	
*#	b.	Financial Report 1. February 28, 2018 2. March 31, 2018 3. FY2018 YTD Financial Summary through March 31, 2018 ACTION: Approve the Financial Reports for the month ended February 28, 2018 and for the month ended March 31, 2018	Yadon
	c.	Administrator's Report • Activities • Commission Meeting, May 8-10, 2018, North Idaho	Murrison/Dalzell

		• Upcoming Commission Meeting Schedule ACTION: For information only	
*#	d.	RFQ for Public Relations ACTION: Approve issuance of the RFQ for Public Relations Services, and authorize Administrator to sign agreement with selected proposer	Yadon
*#	e.	RFP for Proposed Tracker Conservation Statistics Database Update and Enhancements ACTION: Approve issuance of the RFP to update Tracker and authorize Administrator to Sign Agreement with Successful Proposer	Murrison
#	f.	FY 2019-2022 Strategic Plan Update ACTION: For information only	Murrison
*#	g.	FY 2019 Appropriation and Budget Blueprint ACTION: Approve FY 2019 General and Dedicated Fund Blueprints, including setting Trustee and Benefit fund distribution to districts in FY 2019 at: $425,000 in Base funding, $678.000 in Match Formula funding, $100,000 in Operating funding, and $50,000 in Capacity Building funding.	Yadon
	5.	**PROGRAMS**	
#	a.	Resource Conservation and Rangeland Development Program Update ACTION: For information only	Hoebelheinrich
*#	b.	Proposed Policy and Rule Changes to Increase RCRDP Participation ACTION: For consideration and possible action	Hoebelheinrich
#	c.	FY 2017 CREP Annual Report ACTION: For information only	Pentzer
#	d.	Final Report: Deep Soil Sampling Project for Marsh Creek, Minidoka, Twin Falls Priority Areas ACTION: For information only	Firth
	6.	**OTHER BUSINESS**	
	a.	Reports ACTION: For information only	Commissioners, Staff
	b.	Training • Retrieving e-mails using the Samsung Galaxy Tab 4 • Downloading apps ACTION: For information only	Dalzell
	7.	**EXECUTIVE SESSION** *Executive Session is closed to the public. Under the relevant Idaho Code Section(s) noted below, any Board action will be taken publicly in open session directly following Executive Session.* ACTION: Move to enter Executive Session pursuant to Idaho Code § 74-206(1)(f) for the purpose of discussing pending litigation, or controversies not yet being litigated but imminently likely to be litigated with legal counsel. Roll Call Vote.	
	a.	Discussion with legal counsel on pending litigation, or controversies not yet being litigated but imminently likely to be litigated. ACTION: For consideration and possible action outside of Executive Session	Chapple Knowlton
*	**8.**	**OPEN SESSION and ADJOURN** *The Commission will reconvene to take any action resulting from Item #7 Executive Session and to adjourn. The next regular meeting is scheduled for May 8, 2018 in Coeur d'Alene, Idaho.*	

Idaho Soil & Water Conservation Commission

322 E Front St, Suite 560 • Boise Idaho 83702
Telephone: 208-332-1790 • Fax: 208-332-1799

IDAHO SOIL & WATER CONSERVATION COMMISSION
REGULAR MEETING & TELECONFERENCE

Date and Time:
Monday, February 19, 2018
1:00 p.m. – 4:00 p.m. MT

Location:
Idaho Water Center
322 E Front St, Suite 560
Boise, Idaho

MINUTES

COMMISSION MEMBERS PRESENT:
Norman Wright, Chair
Leon Slichter, Secretary (teleconference)
Cathy Roemer
Dave Radford (teleconference)

COMMISSION STAFF PRESENT:
Teri Murrison
Corrine Dalzell
Rhonda Yadon
George Hitz (teleconference)
Delwyne Trefz
Terry Hoebelheinrich

PARTNERS AND GUESTS PRESENT:
Shantel Chapple Knowlton, Office of the Attorney General
Benjamin Kelly, Idaho Association of Soil Conservation Districts (teleconference)

ITEM #1: WELCOME AND ROLL CALL
Chairman Wright called the meeting to order at 1:00 p.m.
Roll call: Chairman Norman Wright, Commissioners Cathy Roemer, and Leon Slichter were present.

ITEM #2: AGENDA REVIEW
Under Item #7, consideration of Loan #A-720 was labeled Item #7a, and discussion with legal counsel was labeled Item #7b.

ITEM #3: PARTNER REPORTS
Action: None taken

ITEM #4a: ADMINISTRATOR'S REPORT
Action: For information only.

Commissioner Radford joined the meeting via teleconference at 1:36 p.m.

ITEM #4b: FINANCIAL REPORTS

Action: Commissioner Roemer moved to *approve the January 30, 2018 Financial Report as submitted*. Commissioner Slichter seconded. Motion carried by unanimous vote.

ITEM #4c: 2018 ENVIROTHON UPDATE

Action: For information only.

ITEM #4d: MINUTES

1. Action: Commissioner Slichter moved to *approve the December 7, 2017 meeting minutes as submitted.* Commissioner Roemer seconded. Motion carried by unanimous vote.
2. Action: Commissioner Roemer moved to *approve the December 28, 2017 meeting minutes as submitted.* Commissioner Slichter seconded. Motion carried by unanimous vote.
3. Action: Commissioner Slichter moved to *approve the January 15, 2018 meeting minutes as submitted.* Commissioner Roemer seconded Motion carried by unanimous vote.

ITEM #5a: RESOURCE CONSERVATION & RANGELAND DEVELOPMENT PROGRAM UPDATE

Action: For information only.

ITEM #5b: PROPOSED POLICY AND RULE CHANGES TO INCREASE RCRDP PARTICIPATION

1. Action: Commissioner Radford moved to *accept policy and proposed Rule changes as recommended by staff, except with Policy Change Action #2 revised to "Accept input from district board on land value range estimates per existing Rule."* Commissioner Roemer seconded. Motion carried by unanimous vote.
2. Action: Commissioner Roemer moved to *authorize staff to pursue an administrative rule change*. Commissioner Radford seconded. Motion carried by unanimous vote.

ITEM #6a: REPORTS

Action: None taken

ITEM #7: EXECUTIVE SESSION

Action: Chairman Wright moved to convene in Executive Session pursuant to Idaho Codes §74-206(1)(d) for the purpose of discussing a loan application and §74-206(1)(f) for the purpose of discussing pending litigation, or controversies not yet being litigated but imminently likely to be litigated, with legal counsel. Commissioner Roemer seconded. Motion carried unanimously by roll call vote.

Executive Session commenced at 3:23 p.m.

Executive Session ended at 5:20 p.m.

Commission reconvened in Open Session at 5:20 p.m.

ITEM #8: OPEN SESSION AND ADJOURN

Commissioner Radford moved to approve Loan #A-720 as recommended by the loan officer. Commissioner Slichter seconded. Motion carried unanimously.

The meeting adjourned at 5:21 p.m. The next Commission Meeting is scheduled for Thursday, April 12, 2018 at 9:00 a.m. in Boise in person and via teleconference.

Respectfully submitted,

Leon Slichter, Secretary

IDAHO SOIL & WATER CONSERVATION COMMISSION

ITEM #4b

TO: **CHAIRMAN WRIGHT AND COMMISSIONERS RADFORD, ROEMER, SLICHTER, AND TREBESCH**
FROM: **RHONDA YADON, FISCAL & HR MANAGER**
DATE: **MARCH 26, 2018**
RE: **FINANCIAL REPORTS, FISCAL MATTERS**

FINANCIAL REPORTS

We are 75% through the year as of the end of March. The Financial Detail Report and Financial Summary Report (including the financial projections for the year) for the month ending March 31, 2018 will be available in hard copy at your meeting. The statewide financial reports will not be available for me to complete these reports until April 4, 2018. For those of you that will be attending the meeting remotely, I will have the reports emailed to you by the end of the day Monday, April 9, 2018. I will review the reports on all the funds in detail at your meeting.

The Financial Detail Report for the month ending February 28, 2018 is attached for your review. As of February, we are 81.8% spent in the general fund, but I believe we will end the year very close to budget. As a comparison, last year at this time, we were 82.45% spent in the general fund. Overall, I believe that we are in good financial standing.

Activity has also begun in the federal grant fund including a $40,000 borrowing limit allowed to us by DFM. This is to cover the grant expenditures until we are reimbursed by NRCS so that we do not actually go negative in this fund. Therefore, the negative balance on our report reflects that we are in reimbursement status, not overspent.

NEW HIRES AND VACANCIES

The Governor signed our supplemental appropriations bill in February. As soon as we receive a contract from the National Fish and Wildlife Foundation, Teri will begin the process of interviewing applicants to hire for the NFWF Sage Grouse Restoration Specialist position. The goal is to be able to hire them and start work in April.

COMMISSIONER HONORARIUMS

Below is a schedule of the honorarium balances as of March 20, 2018. Included in the schedule is the days and amounts budgeted for each Commissioner for FY18. We are in good standing with the travel budget for Commissioners honorariums as we have spent 71.9%. However, for operating travel costs, Commissioners have spent 89.1% of the operating allocation to date compared to 85.7% by the end of March in 2017.

Commissioner	Days Budgeted/ Traveled to Date	Benefit Costs included in Honorariums	Honorariums Budgeted	Expended to Date	Projected Balance/ (Overage)
Wright	30 / 18	$118	$1,618	$979	$639
Roemer	20 / 18	$79	$1,079	$986	$93
Trebesch	12 / 8	$47	$647	$431	$216
Radford	18 / 14	$71	$971	$772	$199
Slichter	20 / 13	$79	$1,079	$710	$369
Totals		$394	$5,394	$3,878	$1,516

RECOMMENDED ACTION: Approve the Financial Reports for the month ended February 28, 2018
Approve the Financial Reports for the month ended March 31, 2018
ATTACHMENTS: SWC Detail Financial Report as of February 28, 2018

SWC DETAIL FINANCIAL REPORT AS OF FEBRUARY 28, 2018

GENERAL FUND & OTHER FUNDS	PERSONNEL			OPERATING			CAPITAL OUTLAY			TRUSTEE & BENEFITS			CASH			
FY18	BUDGET	ACTUAL EXPENSE Thru End of Current Month	BALANCE	BUDGET	ACTUAL EXPENSE Thru End of Current	BALANCE	BUDGET	ACTUAL EXPENSE Thru End of Current	BALANCE	BUDGET	ACTUAL EXPENSE Thru End of Current Month	BALANCE	BEG CASH AT 7/1/17	PLUS TOTAL REC TO DATE	LESS TOTAL EXP TO DATE	ACTUAL CASH BALANCE End of Current
INDEX																
7101 MANAGEMENT ADMIN	323,900	214,089	109,811	48,166	37,403	10,763	15,463	15,463	0				387,529		266,955	120,574
7111 MANAGEMENT BOARD	4,900	3,135	1,765	11,089	7,160	3,929							15,989		10,295	5,694
7201 FIELD STAFF	485,200	319,052	166,148	76,630	68,358	8,272	67,302	49,537	17,765				612,467	16,665	436,947	192,185
7301 PROGRAMS	256,100	167,294	88,806	23,123	17,519	5,604							279,223		184,813	94,410
7310 DISTRICT ALLOCATIONS										1,103,200	1,053,200	50,000	1,103,200		1,053,200	50,000
7320 DISTRICT CAPACITY BLDG										150,000	150,000	0	150,000		150,000	0
7350 CREP	137,100	89,275	47,825	24,892	21,809	3,083	24,500	23,841	659				186,492		134,925	51,567
TOTAL GENERAL FUND 0001	**1,207,200**	**792,845**	**414,355**	**183,900**	**152,249**	**31,651**	**107,265**	**88,841**	**18,424**	**1,253,200**	**1,203,200**	**50,000**	**2,734,900**	**16,665**	**2,237,135**	**514,430**
FY17 ENCUMBRANCES				**28,865**	**6,290**	**22,575**									**6,290**	**22,575**
		65.68%			**82.79%**			**82.82%**			**96.01%**				**81.80%**	
7315 FEDERAL GRANT-NRCS TRS	17,500	3,622	13,878										20,000		3,622	16,378
7316 FEDERAL GRANT-NRCS CTA	162,736	39,270	123,466	16,274	3,547	12,727							20,000	42,326	42,817	19,509
TOTAL FEDERAL FUND 0348	**180,236**	**42,892**	**137,344**	**16,274**	**3,547**	**12,727**	**0**	**0**	**0**	**0**	**0**	**0**	**40,000**	**42,326**	**46,439**	**35,887**
															Borrowing Limit	**(40,000)**
		23.80%			**21.80%**										**109.72%**	**(4,113)**
7325 SWC PROFESSIONAL SERV				30,000	16,651	13,349							16,614	17,474	16,651	11,212
TOTAL DEDICATED FUND 0450	**0**	**0**	**0**	**30,000**	**16,651**	**13,349**	**0**	**0**	**0**	**0**	**0**	**0**	**16,614**	**17,474**	**16,651**	**11,212**
FY17 ENCUMBRANCES				**6,225**	**6,225**	**0**									**6,225**	**0**
					55.50%										**100.22%**	

LOAN FUNDS	PERSONNEL			OPERATING			CAPITAL OUTLAY			CASH				BALANCE SHEET		
FY18	BUDGET	ACTUAL EXPENSE thru End of Current Month	BALANCE	BUDGET	ACTUAL EXPENSE Thru End of Current	BALANCE	BUDGET	ACTUAL EXPENSE Thru End of Current	BALANCE	BEG CASH AT 7/1/17	PLUS TOTAL REC TO DATE	LESS TOTAL EXP TO DATE	ACTUAL CASH BALANCE End of Current	NOTES RECEIVABLE 7/1/17	LOANS PAID OUT, COLLECTIONS /ADJUSTMENTS TO DATE	NOTES RECEIVABLE End of Cur period
7351 RCRDP LOAN ADMIN	167,100	104,077	63,023	146,400	61,510	84,890				6,971,777	598,407	583,180	6,987,004	2,814,686	417,593	2,752,010
TOTAL RCRDP ADMIN 0522-01	**167,100**	**104,077**	**63,023**	**146,400**	**61,510**	**84,890**	**0**	**0**	**0**	**6,971,777**	**598,407**	**583,180**	**6,987,004**		(480,269)	
		62.28%			**42.02%**							**8.36%**				
7361 REVOLVING LOAN - DEQ				30,000	2,591	27,409				45,289	13,038	2,591	55,736	430,006	0	352,968
TOTAL DEQ LOAN 0529-16	**0**	**0**	**0**	**30,000**	**2,591**	**27,409**	**0**	**0**	**0**	**45,289**	**13,038**	**2,591**	**55,736**		(77,038)	
															PAYMENTS/ADJ	**ADV FROM END OF CUR**
														ADV FROM	**TO DATE**	**PERIOD**
					8.64%							**5.72%**		374,409	(72,973)	301,436

MEMO

TO: **CHAIRMAN WRIGHT AND COMMISSIONERS TREBESCH, SLICHTER, ROEMER, AND RADFORD**
FROM: **TERI MURRISON, ADMINISTRATOR**
DATE: **APRIL 5, 2018**
RE: **ADMINISTRATOR'S REPORT**

Activities

Since your last meeting, I've been involved in the following:

- Attended and co-chaired the Larry Brannen Ag Summit
- Attended Legislative hearings before JFAC (budget setting), House Agricultural Affairs, and Senate Resources committees
- Attended via teleconference Department of Fish and Game's Marxan Project Steering Committee meetings (to establish goals for joint Idaho Department of Fish and Game–Nature Conservancy project "Integrating Climate Resilience into the Idaho State Wildlife Action Plan". This project aims to use Idaho State Wildlife Action Plan (SWAP) data and The Nature Conservancy's (TNC) Conserving Nature's Stage (CNS) climate-change resilient lands to create a portfolio of sites appropriate for current and future needs). The Steering Committee's role is to help IDFG develop, and then review, the goals for each conservation target (i.e., all species of greatest conservation need and ecological systems).
- Held initial and subsequent meetings on farmland preservation re the Spring Valley property near Eagle (with Ada SWCD, USFWS, BLM, TNC, the Trust for Public Land, Treasure Valley Land Trust, etc.). Spoke with Senator DenHartog about farmland preservation;
- Attended LTeam presentation with Matt Deniston of Sitka Technology re updating Tracker (see Item following);
- Attended Division 3, 4, 1, 5 and 6 meetings;
- Attended meeting with Chairman, NRCS, Idaho Transportation Department re windborne dust in Eastern Idaho;

Commission Meeting, May 8-9, 2018, Field Tour, North Idaho

Corrine Dalzell has been planning the details of your May Board meeting to be held in Coeur d'Alene. She will provide information at your meeting.

Upcoming Commission Meeting Schedule

Date & Time	Meeting, Location	Meeting Type
May 8-10, 2018	North Idaho Regular Meeting (May 8, 1-5 pm PT), Idaho Fish & Game, 2885 W. Kathleen Ave., Coeur d'Alene, ID	In person
June 8, 2018, 10:00 am, MT June 8, 2018, 1:00 pm MT, Joint Board Meeting w/IASCD Board	ISWCC Conference Room, 322 E. Front Street, Suite 560, Boise, ID	In person

Date & Time	Meeting, Location	Meeting Type
August 30, 2018, 10 am – 3 pm, MT	Regular meeting, 322 E. Front Street, Suite 560, Boise	In person
September 13, 2018, 10 am – 3 pm, MT	Regular meeting, 322 E. Front Street, Suite 560, Boise	In person
November 11-15, 2018 in conjunction with IASCD Annual Conference	Listening Session, Location and time TBD, North Idaho	In person
December 13, 9 am – 2 pm MT (if necessary), TBD	Regular meeting, 322 E. Front Street, Suite 560, Boise	In person or teleconference
January 2019 (to be held in conjunction with JFAC presentation or IASCD Board meeting	Regular meeting, Regular meeting, 322 E. Front Street, Suite 560, Boise Also, Joint Board Meeting with IASCD (location and time TBD)	In person
February 18, 2019, 1 pm – 5 pm MT, held in conjunction with Ag Summit	Regular meeting, 322 E. Front Street, Suite 560, Boise Ag Summit Strolling Supper, February 28, Summit meetings February 19, Red Lion Hotel	In person
April 11, 2019 9 am – 2 pm, MT	Regular meeting, 322 E. Front Street, Suite 560, Boise	In person
May 9, 2019	Regular meeting, 322 E. Front Street, Suite 560, Boise	In person

In addition, should there be important loan or other business to conduct, the Chairman may elect to call a special meeting via teleconference or in person for its consideration.

REQUESTED ACTION: For information only

IDAHO SOIL & WATER
CONSERVATION COMMISSION

ITEM #4d

TO: **CHAIRMAN WRIGHT AND COMMISSIONERS RADFORD, ROEMER, SLICHTER, AND TREBESCH**
FROM: **RHONDA YADON, FISCAL & HR MANAGER**
DATE: **MARCH 26, 2018**
RE: **RFQ FOR PUBLIC RELATIONS**

Back in October 2017, we were informed by Division of Purchasing (DOP) and Office of the Attorney General (AG) that we needed to create a Request for Quote for our Public Relations Services for production of a monthly newsletter and production of an annual video on various topics. These services have an estimated cost of less than $100,000 over a 5-year period, so it fits within the "small purchase" exception in DOP Rules (IDAPA 38.05.01) to the state formal solicitation and bidding requirements as designated in the State Procurement Act, title 67, chapter 92.

> "The informal RFQ process set forth in IDAPA 38.05.01.44.03 would, therefore, need to be followed to procure newsletter copywriting services. The Commission will need to prepare a request for quotes (RFQ) and solicit quotes from at least three vendors who maintain fully staffed offices in Idaho and, if corporations, are registered to do business in the state. *See* Idaho Code § 67-2349. The Commission must then hire the "responsible and responsive" bidder offering the lowest "acceptable" quotation. IDAPA 38.05.01.44.03. The key words in this provision are "responsible" and "acceptable." Any specifications such as vender qualification requirements need to be included in the RFQ in order to be considered in determining whether a vendor is responsible and whether a quote is acceptable. IDAPA 38.05.01.11.44; IDAPA 38.05.01.081.01. The Commission may require the vendor to provide information concerning the vendor's responsibility including: experience, prior performance record, and the ability to meet contractual requirements. IDAPA 38.05.01.081.02." –Shantel Chapple Knowlton

In the interim until the RFQ process is complete, we contracted with Steve Stuebner through June 30, 2018, so that we could continue production of these services until the FY 2019 budget was signed and we could concentrate on this RFQ process. We will notify him and request that he respond to the RFQ for consideration.

REQUESTED ACTION: Approve issuance of the RFQ for Public Relations Services, and authorize Administrator to sign agreement with selected proposer.

Exhibit A – Scope of Work

RFQ[RFQ Number]

The Idaho Soil & Water Conservation Commission (ISWCC) is seeking a qualified and experienced Contractor to provide media and public information services. The Contractor will assist the Idaho Soil and Water Conservation Commission (ISWCC) in creating media that will educate and inform the public, decision makers, partners and other stakeholders about voluntary conservation activities primarily in the State of Idaho, but may include other geographic locations that implement innovative or noteworthy conservation practices.

Goals:

The Contractor will work in partnership with the ISWCC. The project goals are to:

1. Contribute article(s) for the ISWCC's monthly newsletter,
2. Create quality, high-definition video showcasing conservation projects or as directed by the ISWCC,
3. Create unique content for media and messaging of the ISWCC.

General Requirements:

Contractor will be responsible for contacting new media, writers, journalists, etc. Contractor must create and present ideas for media including but not limited to: television, radio, Internet and print. All concepts must be approved by the ISWCC prior to implementation. The cost of creative presentations materials and/or storyboards will be the responsibility of Contractor and must be included in the fully burdened rates quoted on the Cost Sheet.

Projects:

1. Create a monthly newsletter article.
2. Create a video showcasing Conservation the Idaho Way.
3. Arrange, publicize, and staff tours, news conferences, and events, as requested.

Contractor and ISWCC will meet on a regular basis to review, plan and approve all materials. The materials developed or produced for the ISWCC are works made for hire; and will become the property of the ISWCC.

ITEM #4e

MEMO

TO: **CHAIRMAN WRIGHT AND COMMISSIONERS TREBESCH, SLICHTER, ROEMER, AND RADFORD**
FROM: **TERI MURRISON, ADMINISTRATOR**
DATE: **APRIL 5, 2018**
RE: **RFP FOR PROPOSED TRACKER CONSERVATION STATISTICS DATABASE UPDATE AND ENHANCEMENTS**

Board members may know that since 1985 the Commission has maintained statistical data on Commission programs and projects, including the loan program and BMP practices installed. Over the last 32+ years, almost 6,000 entries have been added to the database. This data is kept in a massive database and spreadsheet that are regularly maintained, but infrequently utilized even though the information dramatically demonstrates Commission (and district) accomplishments (see attached Representative Spreadsheet Sample of Tracker Database). Unfortunately, in its present form, there is no easy way to display or utilize it.

This item requests approval to issue an RFP to update and enhance the existing Tracker Database, transitioning it into an online and easily accessible Project Tracker (see attached Scope of Work).

We recently learned that technology exists to take the data we possess, anchor it in a map-based system, and generate an end user maintained, aggregated online inventory by project, implementing organization, location, practice, beneficial outcomes (performance measures such as tons of sediment, pounds of phosphorus, miles of fence, feet of riparian habitat restored, etc.), cost, and more.

Staff will present a demonstration site of selected projects created by Sitka Technology, and discuss potential enhancement capabilities and resulting time savings at your meeting. Attached is a copy of the proposed Scope of Work from the RFP.

REQUESTED ACTION: Approve issuance of the RFP to update Tracker and authorize Administrator to sign agreement with successful proposer.

Attachments:

- Representative Spreadsheet Sample of Tracker Database
- Scope of Work for RFP to Update Tracker

TRACKER UPDATE AND ENHANCEMENT PROJECT
SCOPE OF WORK

Use this Proposal outline as part of your response to the RFP. Keep in mind, the evaluators will be scoring your Proposal based on the methodologies proposed and the completeness of the response to each item listed below. You must describe in detail how you will meet each requirement marked **(ME)** Mandatory Evaluated and **(E)** Evaluated, listed below. Include personnel, proposed timelines, methodologies, and any pertinent information that will be required from ISWCC/IDWB in order to achieve full compliance with all tasks and deliverables. By submitting to a response to this RFP, you are agreeing to perform all services, procedures, and requirements.

The following are examples of anticipated services and projects; however, actual projects may vary.

ANTICIPATED SERVICES/PROJECTS

Identify tasks, deliverables, timeline, and detailed budget for each.

1. **Project Kickoff**

   Initiate this project with a meeting to confirm objectives, clarify requirements, review project schedule and key milestones. Contractor must attend this meeting in person. Must include clarifying the "core" team is for this project including resources provided by ISWCC as well as those by the Contractor. This kickoff meeting should result in clear roles and responsibilities, future meeting cadence and schedule, list of stakeholders and a simple communication plan, and training on the deliverable and requirements tracking tool the Contractor will use to manage this project.

   (ME) Describe how you will accomplish each component of each task and how you will measure success.

2. **Develop New Web-Based Reporting Tool to Replace the Existing Conservation Data Tracker**

   a. Secure a new domain name for hosting of this new tool, along with required security certifications.
   b. Create an initial tool that supports account creation and management, logging in, and administrative capability to assign user roles.
   c. Establish a visual design or "look and feel" for this new tool by working with ISWCC staff to leverage existing visual design templates or prior work.
   d. Develop a web-based replacement for the existing Tracker database. Must be functionally equivalent and assumes new functionality will be handled in subsequent deliverables. Must provide access to agency, partner, and public users. This includes support for managing projects, organizations, funding sources, and performance measures. This must also include support for workflows for proposing new projects in a simple, wizard-like user experience.
   e. Migrate all relevant data (back to 1985) within the existing database to the new reporting tool. This includes categorizing projects by HUC.

   (ME) Describe how you will accomplish each component of each task and how you will measure success.

3. Adapt and Import Existing Performance Measures

Review ISWCC's existing Performance Measures and provide recommendations on how these Performance Measures should be structured in the Tracker database. Determine whether Performance Measures can be calculated automatically from other data in the database, or whether they must be reported manually. For manually reported Performance Measures, determine whether they are aggregated per project, or reported at a program level. Enable workflow to populate both project-based and program-level Performance Measures in the Tracker database.

Work with ISWCC to configure Performance Measure in the Tracker database and enable reporting and analysis of all Performance Measures. This task includes identifying, but not implementing, new performance measures for ISWCC consideration.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

4. Support Workflow for Updating Project Data on an Annual Basis

Projects in the Tracker database must be associated with a primary point of contact. On an annual basis, for all projects that are in an "active" state, provide a mechanism to notify the project primary contact that they must review and update project data, including aggregate expenditures by funding source, performance measure accomplishments, and other project data.

Provide a means for a system administrator to review annual updates and approve or reject the updates. For updates that are rejected, provide a form that allows the administrator to document any additional reporting requirements and communicate those to the project primary contact.

Allow a system administrator to review the status of all projects to determine which projects have been updated in a given reporting cycle.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

5. Support Embedding a "Live" Map on Agency Website

ISWCC would like to provide its partner agencies or organizations the ability to easily and efficiently add an interactive map of its projects to their existing websites. Contractor will engineer and then document a way to do this based on commonly available web technologies/languages (e.g. HTML, CSS, Javascript). This task includes working directly with the first partner agency who wants this capability to ensure a successful implementation. Contractor will then make any necessary refinements to the process/capabilities of this feature so that subsequent implementations are as smooth as possible.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

6. Support Defining and Display of Performance Measure Goals

Within the new tool, let administrative-level users optionally set annual performance measure goals for each performance measure. When displaying performance measure information (e.g. in a chart), display both the goal and the progress towards that goal.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

7. Identify, Assess, and Document Additional Data Management Needs

Identify, assess, and document additional data management needs and opportunities that arise while creating this initial reporting tool. ISWCC anticipates that these needs include improved support for multi-agency programs, conservation loans, Districts' requests for technical assistance, TMDL Implementation Plans, and other needs shared by two or more Districts. Contractor must capture these requirements in enough detail to allow estimating the cost to support them within the new tool. Contractor must also provide access to this list of needs (via a project or requirements tracking system) to enable efficient review and analysis by multiple staff within ISWCC.

The list of additional data management needs may include, but is not limited to, the following improvements:

- Automatically generate, or partially generate, a Strategic Plan Annual Report that includes performance measure accomplishments.
- Streamline the process for Districts requesting Technical Assistance, including the fulfillment of those requests from allocation through to completion.
- Streamline the way District report on their 5-year plans.
- Increase efficiency of annual performance measurements reports and fact sheets.
- Other improvements to reduce the time required of ISWCC or District staff to provide information about the projects they manage.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

8. Regularly Inform ISWCC Administrator on Status and Progress

Including products, services, activities performed and planned, and any meetings scheduled or desired to be scheduled relative to the provision of products and services.

(ME) Describe how you will accomplish each component of each task and how you will measure success.

9. Develop and Provide Guidance and Training for ISWCC and Partners

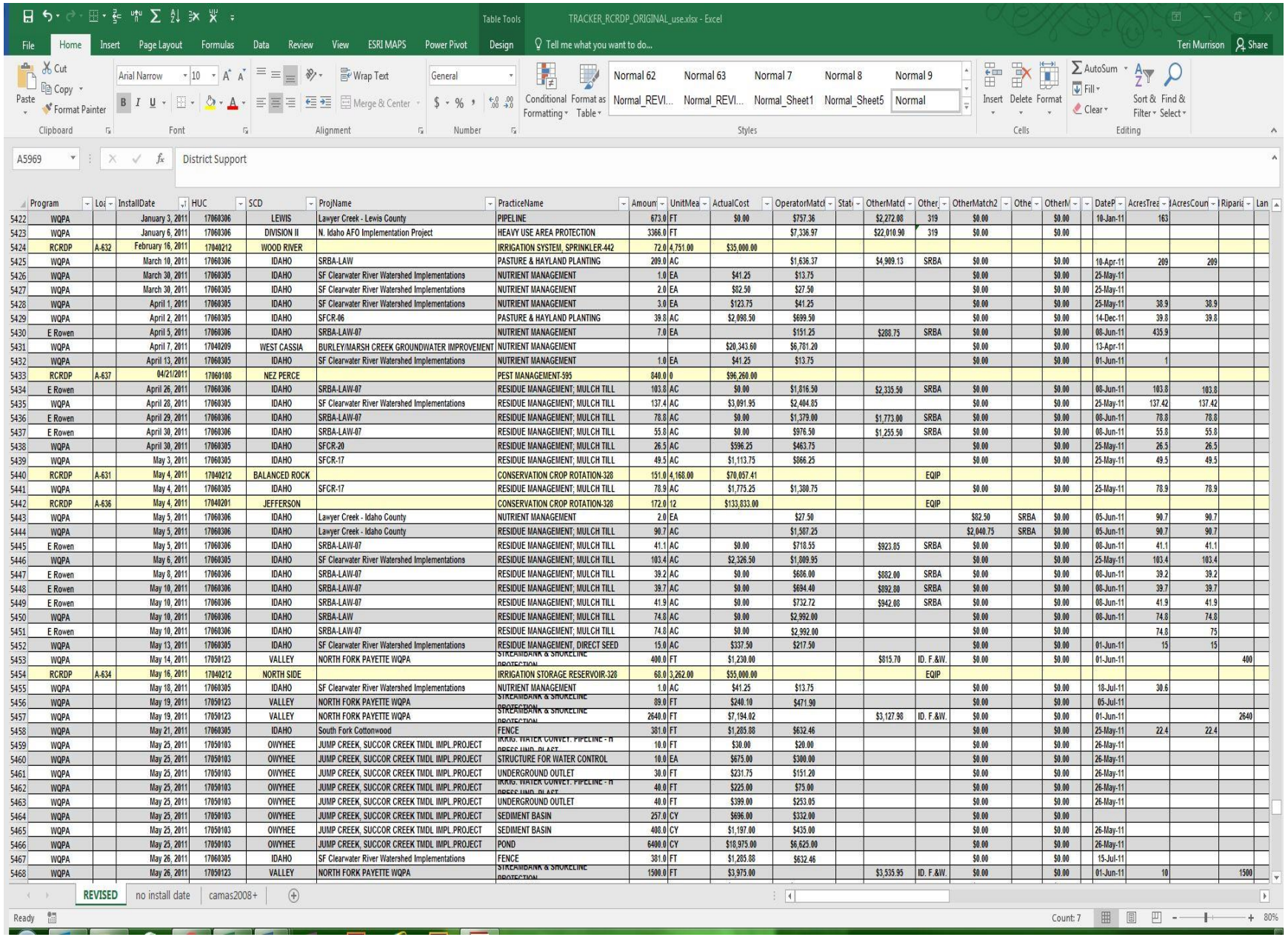
At appropriate times during this project, Contractor must develop guidance documents and training of ISWCC staff and select partners. This training must cover administrative features, as well as standard functionality for project managers/implementers regarding how to update their projects and propose new projects.

(ME) *Describe how you will accomplish each component of each task and how you will measure success.*

10. Manage and Host New Tool

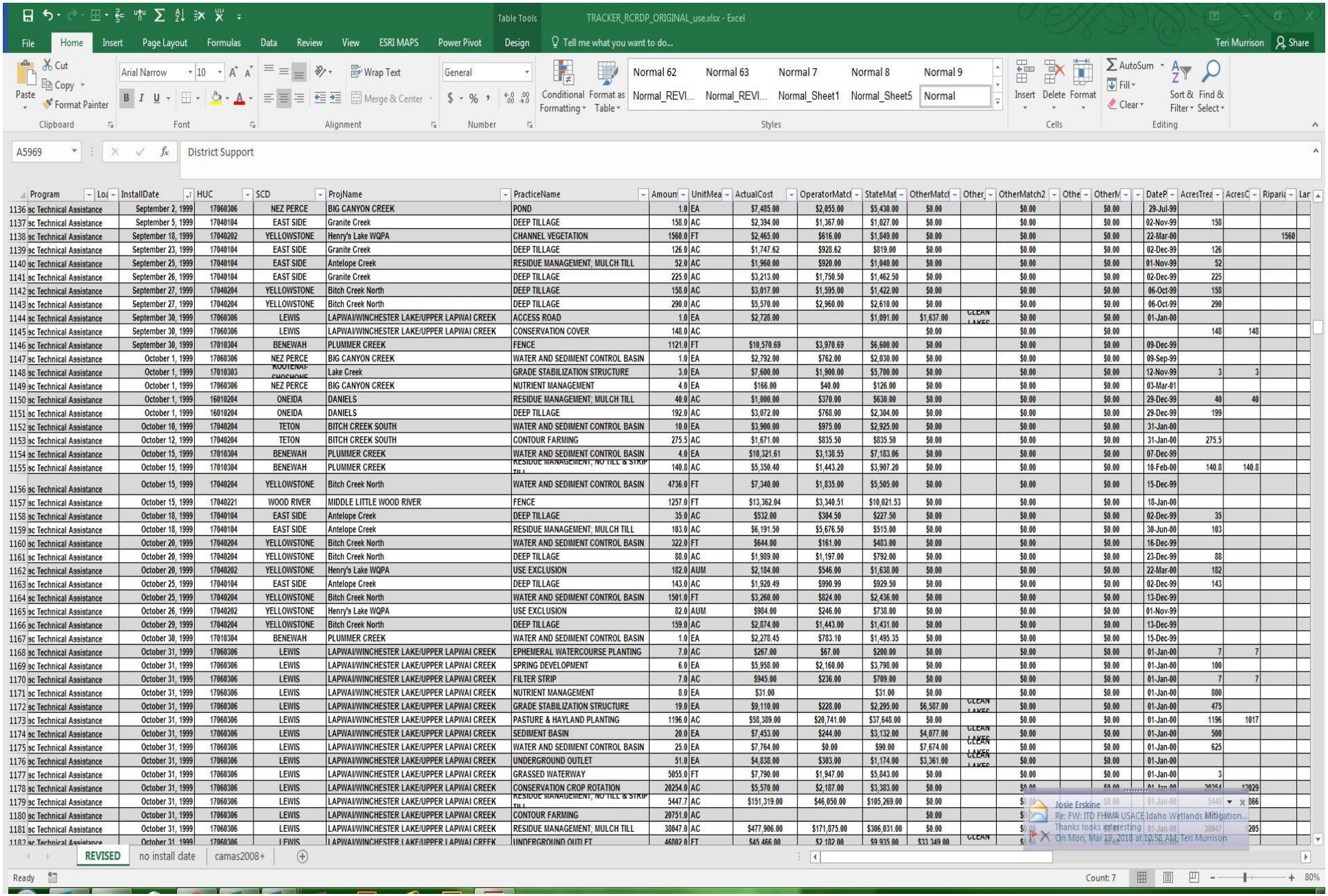
Given ISWCC's lack of IT resources, it is looking for a turnkey solution for both creation, maintenance, and hosting of this new web-based reporting tool. Contractor must host and manage this new tool in their data center, or in a third party data center that the Contractor manages, complying with existing state and federal government confidentiality and cybersecurity protocols and requirements. Contractor must also provide a description of all the application management services that are included. If bug fixes and minor enhancements are not included, explain how these will be handled. Pricing for this task must be provided as a separate monthly or annual cost so that ISWCC can project its long term maintenance costs for this new tool.

(ME) Describe how you will accomplish each component of each task and how you will measure success.



TRACKER_RCRDP_ORIGINAL_use.xlsx - Excel

Program	Loa	InstallDate	HUC	SCD	ProjName	PracticeName	Amoun	UnitMea	ActualCost	OperatorMatcl	Stati	OtherMatcl	Other	OtherMatch2	Othe	OtherM	DateP	AcresTrea	AcresCoun	Riparia	Lan
WQPA		January 3, 2011	17060306	LEWIS	Lawyer Creek - Lewis County	PIPELINE	673.0	FT	$0.00	$757.36		$2,272.08	319	$0.00		$0.00	10-Jan-11	163			
WQPA		January 6, 2011	17060306	DIVISION II	N. Idaho AFO Implementation Project	HEAVY USE AREA PROTECTION	3366.0	FT		$7,336.97		$22,010.90	319	$0.00		$0.00					
RCRDP	A-632	February 16, 2011	17040212	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER-442	72.0	4,751.00	$35,000.00												
WQPA		March 10, 2011	17060306	IDAHO	SRBA-LAW	PASTURE & HAYLAND PLANTING	209.0	AC		$1,636.37		$4,909.13	SRBA	$0.00		$0.00	10-Apr-11	209	209		
WQPA		March 30, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	NUTRIENT MANAGEMENT	1.0	EA	$41.25	$13.75				$0.00		$0.00	25-May-11				
WQPA		March 30, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	NUTRIENT MANAGEMENT	2.0	EA	$82.50	$27.50				$0.00		$0.00	25-May-11				
WQPA		April 1, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	NUTRIENT MANAGEMENT	3.0	EA	$123.75	$41.25				$0.00		$0.00	25-May-11	38.9	38.9		
WQPA		April 2, 2011	17060305	IDAHO	SFCR-06	PASTURE & HAYLAND PLANTING	39.8	AC	$2,098.50	$699.50				$0.00		$0.00	14-Dec-11	39.8	39.8		
E Rowen		April 5, 2011	17060306	IDAHO	SRBA-LAW-07	NUTRIENT MANAGEMENT	7.0	EA		$151.25		$288.75	SRBA	$0.00		$0.00	08-Jun-11	435.9			
WQPA		April 7, 2011	17040209	WEST CASSIA	BURLEY/MARSH CREEK GROUNDWATER IMPROVEMENT	NUTRIENT MANAGEMENT			$20,343.60	$6,781.20				$0.00		$0.00	13-Apr-11				
WQPA		April 13, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	NUTRIENT MANAGEMENT	1.0	EA	$41.25	$13.75				$0.00		$0.00	01-Jun-11	1			
RCRDP	A-637	04/21/2011	17060108	NEZ PERCE		PEST MANAGEMENT-595	840.0	0	$96,260.00												
E Rowen		April 26, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	103.8	AC	$0.00	$1,816.50		$2,335.50	SRBA	$0.00		$0.00	08-Jun-11	103.8	103.8		
WQPA		April 28, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	RESIDUE MANAGEMENT; MULCH TILL	137.4	AC	$3,091.95	$2,404.85				$0.00		$0.00	25-May-11	137.42	137.42		
E Rowen		April 29, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	78.8	AC	$0.00	$1,379.00		$1,773.00	SRBA	$0.00		$0.00	08-Jun-11	78.8	78.8		
E Rowen		April 30, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	55.8	AC	$0.00	$976.50		$1,255.50	SRBA	$0.00		$0.00	08-Jun-11	55.8	55.8		
WQPA		April 30, 2011	17060305	IDAHO	SFCR-20	RESIDUE MANAGEMENT; MULCH TILL	26.5	AC	$596.25	$463.75				$0.00		$0.00	25-May-11	26.5	26.5		
WQPA		May 3, 2011	17060305	IDAHO	SFCR-17	RESIDUE MANAGEMENT; MULCH TILL	49.5	AC	$1,113.75	$866.25				$0.00		$0.00	25-May-11	49.5	49.5		
RCRDP	A-631	May 4, 2011	17040212	BALANCED ROCK		CONSERVATION CROP ROTATION-328	151.0	4,168.00	$70,057.41				EQIP								
WQPA		May 4, 2011	17060305	IDAHO	SFCR-17	RESIDUE MANAGEMENT; MULCH TILL	78.9	AC	$1,775.25	$1,380.75				$0.00		$0.00	25-May-11	78.9	78.9		
RCRDP	A-636	May 4, 2011	17040201	JEFFERSON		CONSERVATION CROP ROTATION-328	172.0	12	$133,833.00				EQIP								
WQPA		May 5, 2011	17060306	IDAHO	Lawyer Creek - Idaho County	NUTRIENT MANAGEMENT	2.0	EA		$27.50				$82.50	SRBA	$0.00	05-Jun-11	90.7	90.7		
WQPA		May 5, 2011	17060306	IDAHO	Lawyer Creek - Idaho County	RESIDUE MANAGEMENT; MULCH TILL	90.7	AC		$1,587.25				$2,040.75	SRBA	$0.00	05-Jun-11	90.7	90.7		
E Rowen		May 5, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	41.1	AC	$0.00	$718.55		$923.85	SRBA	$0.00		$0.00	08-Jun-11	41.1	41.1		
WQPA		May 6, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	RESIDUE MANAGEMENT; MULCH TILL	103.4	AC	$2,326.50	$1,809.95				$0.00		$0.00	25-May-11	103.4	103.4		
E Rowen		May 8, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	39.2	AC	$0.00	$686.00		$882.00	SRBA	$0.00		$0.00	08-Jun-11	39.2	39.2		
E Rowen		May 10, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	39.7	AC	$0.00	$694.40		$892.80	SRBA	$0.00		$0.00	08-Jun-11	39.7	39.7		
E Rowen		May 10, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	41.9	AC	$0.00	$732.72		$942.08	SRBA	$0.00		$0.00	08-Jun-11	41.9	41.9		
WQPA		May 10, 2011	17060306	IDAHO	SRBA-LAW	RESIDUE MANAGEMENT; MULCH TILL	74.8	AC	$0.00	$2,992.00				$0.00		$0.00	08-Jun-11	74.8	74.8		
E Rowen		May 10, 2011	17060306	IDAHO	SRBA-LAW-07	RESIDUE MANAGEMENT; MULCH TILL	74.8	AC	$0.00	$2,992.00				$0.00		$0.00		74.8	75		
WQPA		May 13, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	RESIDUE MANAGEMENT, DIRECT SEED	15.0	AC	$337.50	$217.50				$0.00		$0.00	01-Jun-11	15	15		
WQPA		May 14, 2011	17050123	VALLEY	NORTH FORK PAYETTE WQPA	STREAMBANK & SHORELINE PROTECTION	400.0	FT	$1,230.00			$815.70	ID. F.&W.	$0.00		$0.00	01-Jun-11			400	
RCRDP	A-634	May 16, 2011	17040212	NORTH SIDE		IRRIGATION STORAGE RESERVOIR-328	68.0	3,262.00	$55,000.00				EQIP								
WQPA		May 18, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	NUTRIENT MANAGEMENT	1.0	AC	$41.25	$13.75				$0.00		$0.00	18-Jul-11	30.6			
WQPA		May 19, 2011	17050123	VALLEY	NORTH FORK PAYETTE WQPA	STREAMBANK & SHORELINE PROTECTION	89.0	FT	$240.10	$471.90				$0.00		$0.00	05-Jul-11				
WQPA		May 19, 2011	17050123	VALLEY	NORTH FORK PAYETTE WQPA	STREAMBANK & SHORELINE PROTECTION	2640.0	FT	$7,194.02			$3,127.98	ID. F.&W.	$0.00		$0.00	01-Jun-11			2640	
WQPA		May 21, 2011	17060305	IDAHO	South Fork Cottonwood	FENCE	381.0	FT	$1,285.88	$632.46				$0.00		$0.00	25-May-11	22.4	22.4		
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	10.0	FT	$30.00	$20.00				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	STRUCTURE FOR WATER CONTROL	10.0	EA	$675.00	$300.00				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	UNDERGROUND OUTLET	30.0	FT	$231.75	$151.20				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	40.0	FT	$225.00	$75.00				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	UNDERGROUND OUTLET	40.0	FT	$399.00	$253.05				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	SEDIMENT BASIN	257.0	CY	$696.00	$332.00				$0.00		$0.00					
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	SEDIMENT BASIN	408.0	CY	$1,197.00	$435.00				$0.00		$0.00	26-May-11				
WQPA		May 25, 2011	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	POND	6400.0	CY	$18,975.00	$6,625.00				$0.00		$0.00	26-May-11				
WQPA		May 26, 2011	17060305	IDAHO	SF Clearwater River Watershed Implementations	FENCE	381.0	FT	$1,285.88	$632.46				$0.00		$0.00	15-Jul-11				
WQPA		May 26, 2011	17050123	VALLEY	NORTH FORK PAYETTE WQPA	STREAMBANK & SHORELINE PROTECTION	1500.0	FT	$3,975.00			$3,535.95	ID. F.&W.	$0.00		$0.00	01-Jun-11	10		1500	


TRACKER_RCRDP_ORIGINAL_use.xlsx - Excel
Table Tools
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Tell me what you want to do...
Teri Murrison
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10
Wrap Text
Merge & Center
General
Conditional Formatting
Format as Table
Normal 62
Normal 63
Normal 7
Normal 8
Normal 9
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Normal_Sheet5
Normal
Insert
Delete
Format
AutoSum
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Clear
Sort & Filter
Find & Select
Clipboard
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Alignment
Number
Styles
Cells
Editing
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District Support
Program
InstallDate
HUC
SCD
ProjName
PracticeName
Amoun
UnitMea
ActualCost
OperatorMatcl
StateMat
OtherMatcl
OtherMatch2
DateP
AcresTrea
AcresC
Ripariz
Lar
sc Technical Assistance
September 2, 1999
17060306
NEZ PERCE
BIG CANYON CREEK
POND
1.0
EA
$7,485.00
$2,055.00
$5,430.00
$0.00
$0.00
29-Jul-99
sc Technical Assistance
September 5, 1999
17040104
EAST SIDE
Granite Creek
DEEP TILLAGE
158.0
AC
$2,394.00
$1,367.00
$1,027.00
$0.00
$0.00
02-Nov-99
158
sc Technical Assistance
September 18, 1999
17040202
YELLOWSTONE
Henry's Lake WQPA
CHANNEL VEGETATION
1560.0
FT
$2,465.00
$616.00
$1,849.00
$0.00
$0.00
22-Mar-00
1560
sc Technical Assistance
September 23, 1999
17040104
EAST SIDE
Granite Creek
DEEP TILLAGE
126.0
AC
$1,747.62
$928.62
$819.00
$0.00
$0.00
02-Dec-99
126
sc Technical Assistance
September 25, 1999
17040104
EAST SIDE
Antelope Creek
RESIDUE MANAGEMENT; MULCH TILL
52.0
AC
$1,960.00
$920.00
$1,040.00
$0.00
$0.00
01-Nov-99
52
sc Technical Assistance
September 26, 1999
17040104
EAST SIDE
Granite Creek
DEEP TILLAGE
225.0
AC
$3,213.00
$1,750.50
$1,462.50
$0.00
$0.00
02-Dec-99
225
sc Technical Assistance
September 27, 1999
17040204
YELLOWSTONE
Bitch Creek North
DEEP TILLAGE
158.0
AC
$3,017.00
$1,595.00
$1,422.00
$0.00
$0.00
06-Oct-99
158
sc Technical Assistance
September 27, 1999
17040204
YELLOWSTONE
Bitch Creek North
DEEP TILLAGE
290.0
AC
$5,570.00
$2,960.00
$2,610.00
$0.00
$0.00
06-Oct-99
290
sc Technical Assistance
September 30, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
ACCESS ROAD
1.0
EA
$2,728.00
$1,091.00
$1,637.00
$0.00
$0.00
01-Jan-00
sc Technical Assistance
September 30, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
CONSERVATION COVER
148.0
AC
$0.00
$0.00
$0.00
148
148
sc Technical Assistance
September 30, 1999
17010304
BENEWAH
PLUMMER CREEK
FENCE
1121.0
FT
$10,570.69
$3,970.69
$6,600.00
$0.00
$0.00
09-Dec-99
sc Technical Assistance
October 1, 1999
17060306
NEZ PERCE
BIG CANYON CREEK
WATER AND SEDIMENT CONTROL BASIN
1.0
EA
$2,792.00
$762.00
$2,030.00
$0.00
$0.00
09-Sep-99
sc Technical Assistance
October 1, 1999
17010303
Lake Creek
GRADE STABILIZATION STRUCTURE
3.0
EA
$7,600.00
$1,900.00
$5,700.00
$0.00
$0.00
12-Nov-99
3
3
sc Technical Assistance
October 1, 1999
17060306
NEZ PERCE
BIG CANYON CREEK
NUTRIENT MANAGEMENT
4.0
EA
$166.00
$40.00
$126.00
$0.00
$0.00
03-Mar-01
sc Technical Assistance
October 1, 1999
16010204
ONEIDA
DANIELS
RESIDUE MANAGEMENT; MULCH TILL
40.0
AC
$1,000.00
$370.00
$630.00
$0.00
$0.00
29-Dec-99
40
40
sc Technical Assistance
October 1, 1999
16010204
ONEIDA
DANIELS
DEEP TILLAGE
192.0
AC
$3,072.00
$768.00
$2,304.00
$0.00
$0.00
29-Dec-99
199
sc Technical Assistance
October 10, 1999
17040204
TETON
BITCH CREEK SOUTH
WATER AND SEDIMENT CONTROL BASIN
10.0
EA
$3,900.00
$975.00
$2,925.00
$0.00
$0.00
31-Jan-00
sc Technical Assistance
October 12, 1999
17040204
TETON
BITCH CREEK SOUTH
CONTOUR FARMING
275.5
AC
$1,671.00
$835.50
$835.50
$0.00
$0.00
31-Jan-00
275.5
sc Technical Assistance
October 15, 1999
17010304
BENEWAH
PLUMMER CREEK
WATER AND SEDIMENT CONTROL BASIN
4.0
EA
$10,321.61
$3,138.55
$7,183.06
$0.00
$0.00
07-Dec-99
sc Technical Assistance
October 15, 1999
17010304
BENEWAH
PLUMMER CREEK
RESIDUE MANAGEMENT; NO TILL & STRIP TILL
140.8
AC
$5,350.40
$1,443.20
$3,907.20
$0.00
$0.00
10-Feb-00
140.8
140.8
sc Technical Assistance
October 15, 1999
17040204
YELLOWSTONE
Bitch Creek North
WATER AND SEDIMENT CONTROL BASIN
4736.0
FT
$7,340.00
$1,835.00
$5,505.00
$0.00
$0.00
15-Dec-99
sc Technical Assistance
October 15, 1999
17040221
WOOD RIVER
MIDDLE LITTLE WOOD RIVER
FENCE
1257.0
FT
$13,362.04
$3,340.51
$10,021.53
$0.00
$0.00
18-Jan-00
sc Technical Assistance
October 18, 1999
17040104
EAST SIDE
Antelope Creek
DEEP TILLAGE
35.0
AC
$532.00
$304.50
$227.50
$0.00
$0.00
02-Dec-99
35
sc Technical Assistance
October 18, 1999
17040104
EAST SIDE
Antelope Creek
RESIDUE MANAGEMENT; MULCH TILL
103.0
AC
$6,191.50
$5,676.50
$515.00
$0.00
$0.00
30-Jun-00
103
sc Technical Assistance
October 20, 1999
17040204
YELLOWSTONE
Bitch Creek North
WATER AND SEDIMENT CONTROL BASIN
322.0
FT
$644.00
$161.00
$483.00
$0.00
$0.00
16-Dec-99
sc Technical Assistance
October 20, 1999
17040204
YELLOWSTONE
Bitch Creek North
DEEP TILLAGE
88.0
AC
$1,989.00
$1,197.00
$792.00
$0.00
$0.00
23-Dec-99
88
sc Technical Assistance
October 20, 1999
17040202
YELLOWSTONE
Henry's Lake WQPA
USE EXCLUSION
182.0
AUM
$2,184.00
$546.00
$1,638.00
$0.00
$0.00
22-Mar-00
182
sc Technical Assistance
October 25, 1999
17040104
EAST SIDE
Antelope Creek
DEEP TILLAGE
143.0
AC
$1,920.49
$990.99
$929.50
$0.00
$0.00
02-Dec-99
143
sc Technical Assistance
October 25, 1999
17040204
YELLOWSTONE
Bitch Creek North
WATER AND SEDIMENT CONTROL BASIN
1501.0
FT
$3,260.00
$824.00
$2,436.00
$0.00
$0.00
13-Dec-99
sc Technical Assistance
October 26, 1999
17040202
YELLOWSTONE
Henry's Lake WQPA
USE EXCLUSION
82.0
AUM
$984.00
$246.00
$738.00
$0.00
$0.00
01-Nov-99
sc Technical Assistance
October 29, 1999
17040204
YELLOWSTONE
Bitch Creek North
DEEP TILLAGE
159.0
AC
$2,874.00
$1,443.00
$1,431.00
$0.00
$0.00
13-Dec-99
sc Technical Assistance
October 30, 1999
17010304
BENEWAH
PLUMMER CREEK
WATER AND SEDIMENT CONTROL BASIN
1.0
EA
$2,278.45
$783.10
$1,495.35
$0.00
$0.00
15-Dec-99
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October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
EPHEMERAL WATERCOURSE PLANTING
7.0
AC
$267.00
$67.00
$200.00
$0.00
$0.00
01-Jan-00
7
7
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
SPRING DEVELOPMENT
6.0
EA
$5,958.00
$2,160.00
$3,798.00
$0.00
$0.00
01-Jan-00
100
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
FILTER STRIP
7.0
AC
$945.00
$236.00
$709.00
$0.00
$0.00
01-Jan-00
7
7
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
NUTRIENT MANAGEMENT
8.0
EA
$31.00
$31.00
$0.00
$0.00
01-Jan-00
800
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
GRADE STABILIZATION STRUCTURE
19.0
EA
$9,110.00
$228.00
$2,295.00
$6,587.00
$0.00
01-Jan-00
475
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October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
PASTURE & HAYLAND PLANTING
1196.0
AC
$58,389.00
$20,741.00
$37,648.00
$0.00
$0.00
01-Jan-00
1196
1017
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
SEDIMENT BASIN
20.0
EA
$7,453.00
$244.00
$3,132.00
$4,077.00
$0.00
01-Jan-00
500
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
WATER AND SEDIMENT CONTROL BASIN
25.0
EA
$7,764.00
$0.00
$90.00
$7,674.00
$0.00
01-Jan-00
625
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
UNDERGROUND OUTLET
51.0
EA
$4,838.00
$303.00
$1,174.00
$3,361.00
$0.00
01-Jan-00
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
GRASSED WATERWAY
5055.0
FT
$7,790.00
$1,947.00
$5,843.00
$0.00
$0.00
01-Jan-00
3
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
CONSERVATION CROP ROTATION
20254.0
AC
$5,570.00
$2,187.00
$3,383.00
$0.00
$0.00
01-Jan-00
20254
12029
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
RESIDUE MANAGEMENT; NO TILL & STRIP TILL
5447.7
AC
$151,319.00
$46,050.00
$105,269.00
$0.00
$0.00
01-Jan-00
5448
866
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
CONTOUR FARMING
20751.0
AC
$0.00
$0.00
01-Jan-00
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
RESIDUE MANAGEMENT; MULCH TILL
38047.0
AC
$477,906.00
$171,875.00
$306,031.00
$0.00
$0.00
01-Jan-00
38047
205
sc Technical Assistance
October 31, 1999
17060306
LEWIS
LAPWAI/WINCHESTER LAKE/UPPER LAPWAI CREEK
UNDERGROUND OUTLET
46802.0
FT
$45,466.00
$2,182.00
$9,935.00
$33,349.00
$0.00
01-Jan-00
Josie Erskine
Re: FW: ITD FHWA USACE Idaho Wetlands Mitigation...
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On Mon, Mar 19, 2018 at 10:58 AM, Teri Murrison
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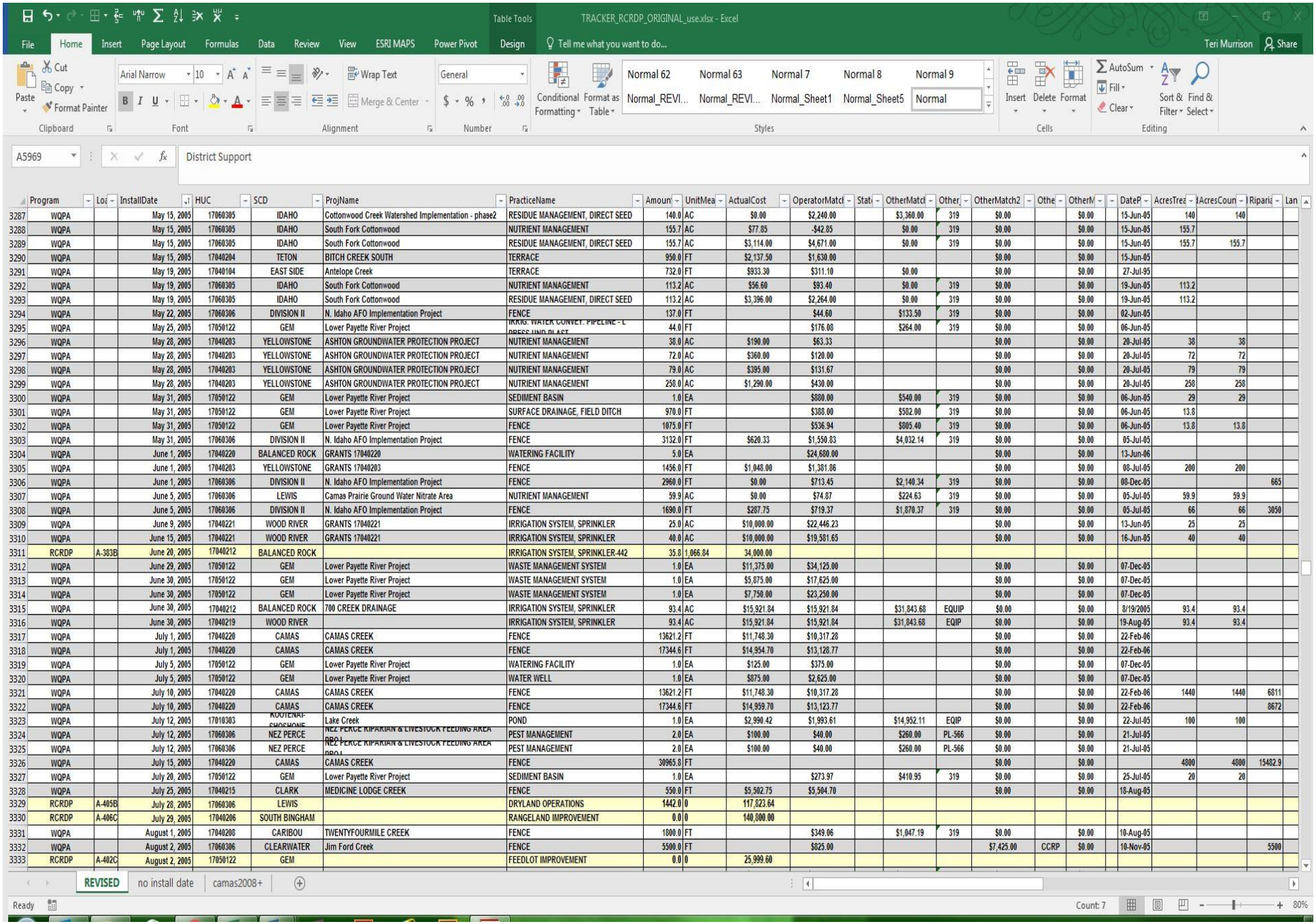
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3287 WQPA May 15, 2005 17060305 IDAHO Cottonwood Creek Watershed Implementation - phase2 RESIDUE MANAGEMENT, DIRECT SEED 140.0 AC $0.00 $2,240.00 $3,360.00 319 $0.00 $0.00 15-Jun-05 140 140
3288 WQPA May 15, 2005 17060305 IDAHO South Fork Cottonwood NUTRIENT MANAGEMENT 155.7 AC $77.85 -$42.85 $0.00 319 $0.00 $0.00 15-Jun-05 155.7
3289 WQPA May 15, 2005 17060305 IDAHO South Fork Cottonwood RESIDUE MANAGEMENT, DIRECT SEED 155.7 AC $3,114.00 $4,671.00 $0.00 319 $0.00 $0.00 15-Jun-05 155.7 155.7
3290 WQPA May 15, 2005 17040204 TETON BITCH CREEK SOUTH TERRACE 950.0 FT $2,137.50 $1,630.00 $0.00 15-Jun-05
3291 WQPA May 19, 2005 17040104 EAST SIDE Antelope Creek TERRACE 732.0 FT $933.30 $311.10 $0.00 $0.00 27-Jul-95
3292 WQPA May 19, 2005 17060305 IDAHO South Fork Cottonwood NUTRIENT MANAGEMENT 113.2 AC $56.60 $93.40 $0.00 319 $0.00 $0.00 19-Jun-05 113.2
3293 WQPA May 19, 2005 17060305 IDAHO South Fork Cottonwood RESIDUE MANAGEMENT, DIRECT SEED 113.2 AC $3,396.00 $2,264.00 $0.00 319 $0.00 $0.00 19-Jun-05 113.2
3294 WQPA May 22, 2005 17060306 DIVISION II N. Idaho AFO Implementation Project FENCE 137.0 FT $44.60 $133.50 319 $0.00 $0.00 02-Jun-05
3295 WQPA May 25, 2005 17050122 GEM Lower Payette River Project IRRIG. WATER CONVEY. PIPELINE - L PRESS UND PLAST 44.0 FT $176.08 $264.00 319 $0.00 $0.00 06-Jun-05
3296 WQPA May 28, 2005 17040203 YELLOWSTONE ASHTON GROUNDWATER PROTECTION PROJECT NUTRIENT MANAGEMENT 38.0 AC $190.00 $63.33 $0.00 $0.00 20-Jul-05 38 38
3297 WQPA May 28, 2005 17040203 YELLOWSTONE ASHTON GROUNDWATER PROTECTION PROJECT NUTRIENT MANAGEMENT 72.0 AC $360.00 $120.00 $0.00 $0.00 20-Jul-05 72 72
3298 WQPA May 28, 2005 17040203 YELLOWSTONE ASHTON GROUNDWATER PROTECTION PROJECT NUTRIENT MANAGEMENT 79.0 AC $395.00 $131.67 $0.00 $0.00 20-Jul-05 79 79
3299 WQPA May 28, 2005 17040203 YELLOWSTONE ASHTON GROUNDWATER PROTECTION PROJECT NUTRIENT MANAGEMENT 258.0 AC $1,290.00 $430.00 $0.00 $0.00 20-Jul-05 258 258
3300 WQPA May 31, 2005 17050122 GEM Lower Payette River Project SEDIMENT BASIN 1.0 EA $880.00 $540.00 319 $0.00 $0.00 06-Jun-05 29 29
3301 WQPA May 31, 2005 17050122 GEM Lower Payette River Project SURFACE DRAINAGE, FIELD DITCH 970.0 FT $388.00 $582.00 319 $0.00 $0.00 06-Jun-05 13.8
3302 WQPA May 31, 2005 17050122 GEM Lower Payette River Project FENCE 1075.0 FT $536.94 $805.40 319 $0.00 $0.00 06-Jun-05 13.8 13.8
3303 WQPA May 31, 2005 17060306 DIVISION II N. Idaho AFO Implementation Project FENCE 3132.0 FT $620.33 $1,550.83 $4,032.14 319 $0.00 $0.00 05-Jul-05
3304 WQPA June 1, 2005 17040220 BALANCED ROCK GRANTS 17040220 WATERING FACILITY 5.0 EA $24,680.00 $0.00 $0.00 13-Jun-06
3305 WQPA June 1, 2005 17040203 YELLOWSTONE GRANTS 17040203 FENCE 1456.0 FT $1,048.00 $1,381.86 $0.00 $0.00 08-Jul-05 200 200
3306 WQPA June 1, 2005 17060306 DIVISION II N. Idaho AFO Implementation Project FENCE 2960.0 FT $0.00 $713.45 $2,140.34 319 $0.00 $0.00 08-Dec-05 665
3307 WQPA June 5, 2005 17060306 LEWIS Camas Prairie Ground Water Nitrate Area NUTRIENT MANAGEMENT 59.9 AC $0.00 $74.87 $224.63 319 $0.00 $0.00 05-Jul-05 59.9 59.9
3308 WQPA June 5, 2005 17060306 DIVISION II N. Idaho AFO Implementation Project FENCE 1690.0 FT $287.75 $719.37 $1,870.37 319 $0.00 $0.00 05-Jul-05 66 66 3050
3309 WQPA June 9, 2005 17040221 WOOD RIVER GRANTS 17040221 IRRIGATION SYSTEM, SPRINKLER 25.0 AC $10,000.00 $22,446.23 $0.00 $0.00 13-Jun-05 25 25
3310 WQPA June 15, 2005 17040221 WOOD RIVER GRANTS 17040221 IRRIGATION SYSTEM, SPRINKLER 40.0 AC $10,000.00 $19,581.65 $0.00 $0.00 16-Jun-05 40 40
3311 RCRDP A-383B June 20, 2005 17040212 BALANCED ROCK IRRIGATION SYSTEM, SPRINKLER-442 35.8 1,066.84 34,000.00
3312 WQPA June 29, 2005 17050122 GEM Lower Payette River Project WASTE MANAGEMENT SYSTEM 1.0 EA $11,375.00 $34,125.00 $0.00 $0.00 07-Dec-05
3313 WQPA June 30, 2005 17050122 GEM Lower Payette River Project WASTE MANAGEMENT SYSTEM 1.0 EA $5,875.00 $17,625.00 $0.00 $0.00 07-Dec-05
3314 WQPA June 30, 2005 17050122 GEM Lower Payette River Project WASTE MANAGEMENT SYSTEM 1.0 EA $7,750.00 $23,250.00 $0.00 $0.00 07-Dec-05
3315 WQPA June 30, 2005 17040212 BALANCED ROCK 700 CREEK DRAINAGE IRRIGATION SYSTEM, SPRINKLER 93.4 AC $15,921.84 $15,921.84 $31,843.68 EQUIP $0.00 $0.00 8/19/2005 93.4 93.4
3316 WQPA June 30, 2005 17040219 WOOD RIVER IRRIGATION SYSTEM, SPRINKLER 93.4 AC $15,921.84 $15,921.84 $31,843.68 EQIP $0.00 $0.00 19-Aug-05 93.4 93.4
3317 WQPA July 1, 2005 17040220 CAMAS CAMAS CREEK FENCE 13621.2 FT $11,748.30 $10,317.28 $0.00 $0.00 22-Feb-06
3318 WQPA July 1, 2005 17040220 CAMAS CAMAS CREEK FENCE 17344.6 FT $14,954.70 $13,128.77 $0.00 $0.00 22-Feb-06
3319 WQPA July 5, 2005 17050122 GEM Lower Payette River Project WATERING FACILITY 1.0 EA $125.00 $375.00 $0.00 $0.00 07-Dec-05
3320 WQPA July 5, 2005 17050122 GEM Lower Payette River Project WATER WELL 1.0 EA $875.00 $2,625.00 $0.00 $0.00 07-Dec-05
3321 WQPA July 10, 2005 17040220 CAMAS CAMAS CREEK FENCE 13621.2 FT $11,748.30 $10,317.28 $0.00 $0.00 22-Feb-06 1440 1440 6811
3322 WQPA July 10, 2005 17040220 CAMAS CAMAS CREEK FENCE 17344.6 FT $14,959.70 $13,123.77 $0.00 $0.00 22-Feb-06 8672
3323 WQPA July 12, 2005 17010303 KOOTENAI-SHOSHONE Lake Creek POND 1.0 EA $2,990.42 $1,993.61 $14,952.11 EQIP $0.00 $0.00 22-Jul-05 100 100
3324 WQPA July 12, 2005 17060306 NEZ PERCE NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO I PEST MANAGEMENT 2.0 EA $100.00 $40.00 $260.00 PL-566 $0.00 $0.00 21-Jul-05
3325 WQPA July 12, 2005 17060306 NEZ PERCE NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO I PEST MANAGEMENT 2.0 EA $100.00 $40.00 $260.00 PL-566 $0.00 $0.00 21-Jul-05
3326 WQPA July 15, 2005 17040220 CAMAS CAMAS CREEK FENCE 30965.8 FT $0.00 $0.00 4800 4800 15482.9
3327 WQPA July 20, 2005 17050122 GEM Lower Payette River Project SEDIMENT BASIN 1.0 EA $273.97 $410.95 319 $0.00 $0.00 25-Jul-05 20 20
3328 WQPA July 25, 2005 17040215 CLARK MEDICINE LODGE CREEK FENCE 550.0 FT $5,502.75 $5,504.70 $0.00 $0.00 18-Aug-05
3329 RCRDP A-405B July 28, 2005 17060306 LEWIS DRYLAND OPERATIONS 1442.0 0 117,823.64
3330 RCRDP A-406C July 29, 2005 17040206 SOUTH BINGHAM RANGELAND IMPROVEMENT 0.0 0 140,800.00
3331 WQPA August 1, 2005 17040208 CARIBOU TWENTYFOURMILE CREEK FENCE 1800.0 FT $349.06 $1,047.19 319 $0.00 $0.00 10-Aug-05
3332 WQPA August 2, 2005 17060306 CLEARWATER Jim Ford Creek FENCE 5500.0 FT $825.00 $7,425.00 CCRP $0.00 10-Nov-05 5500
3333 RCRDP A-402C August 2, 2005 17050122 GEM FEEDLOT IMPROVEMENT 0.0 0 25,999.60
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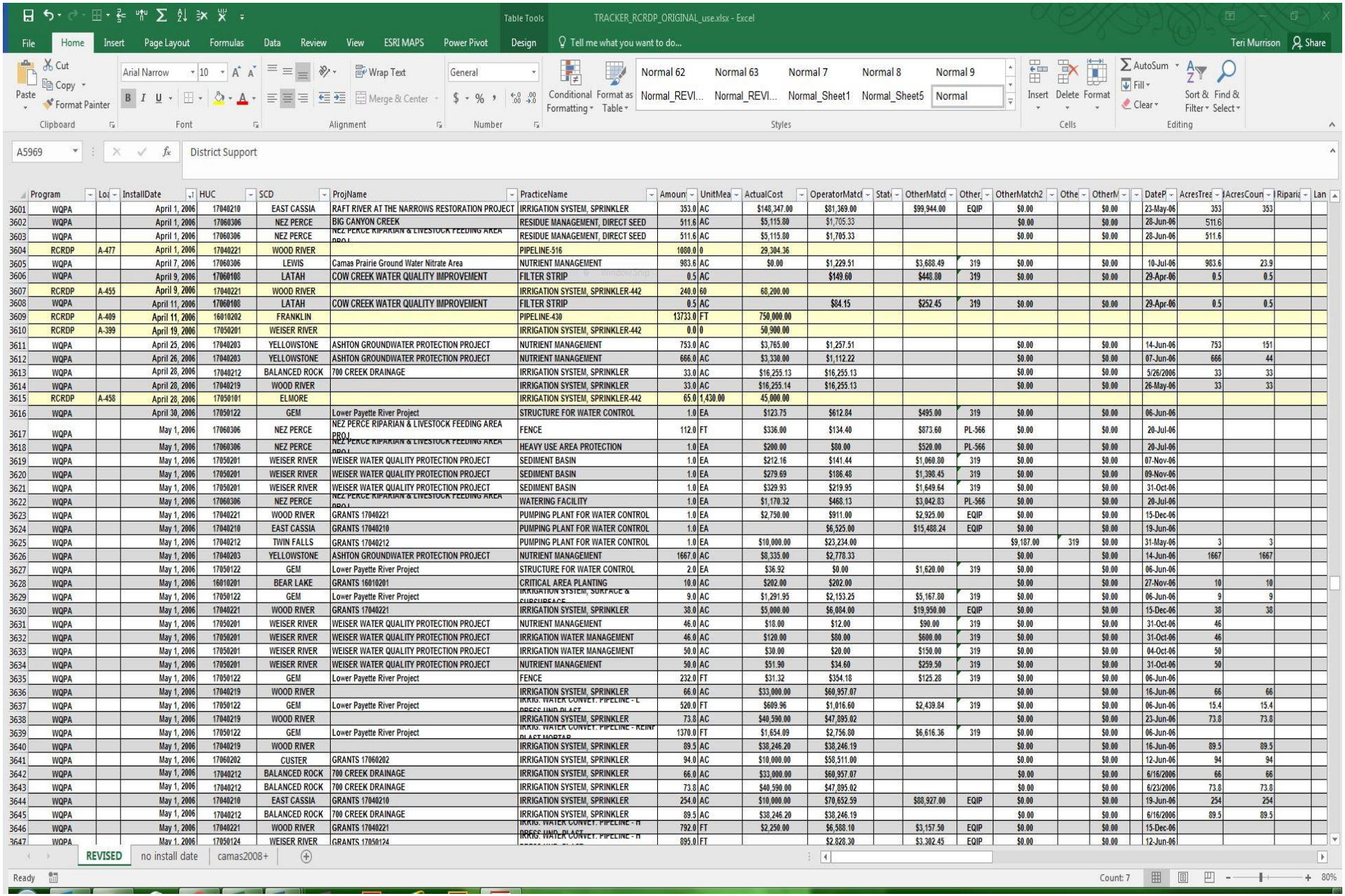

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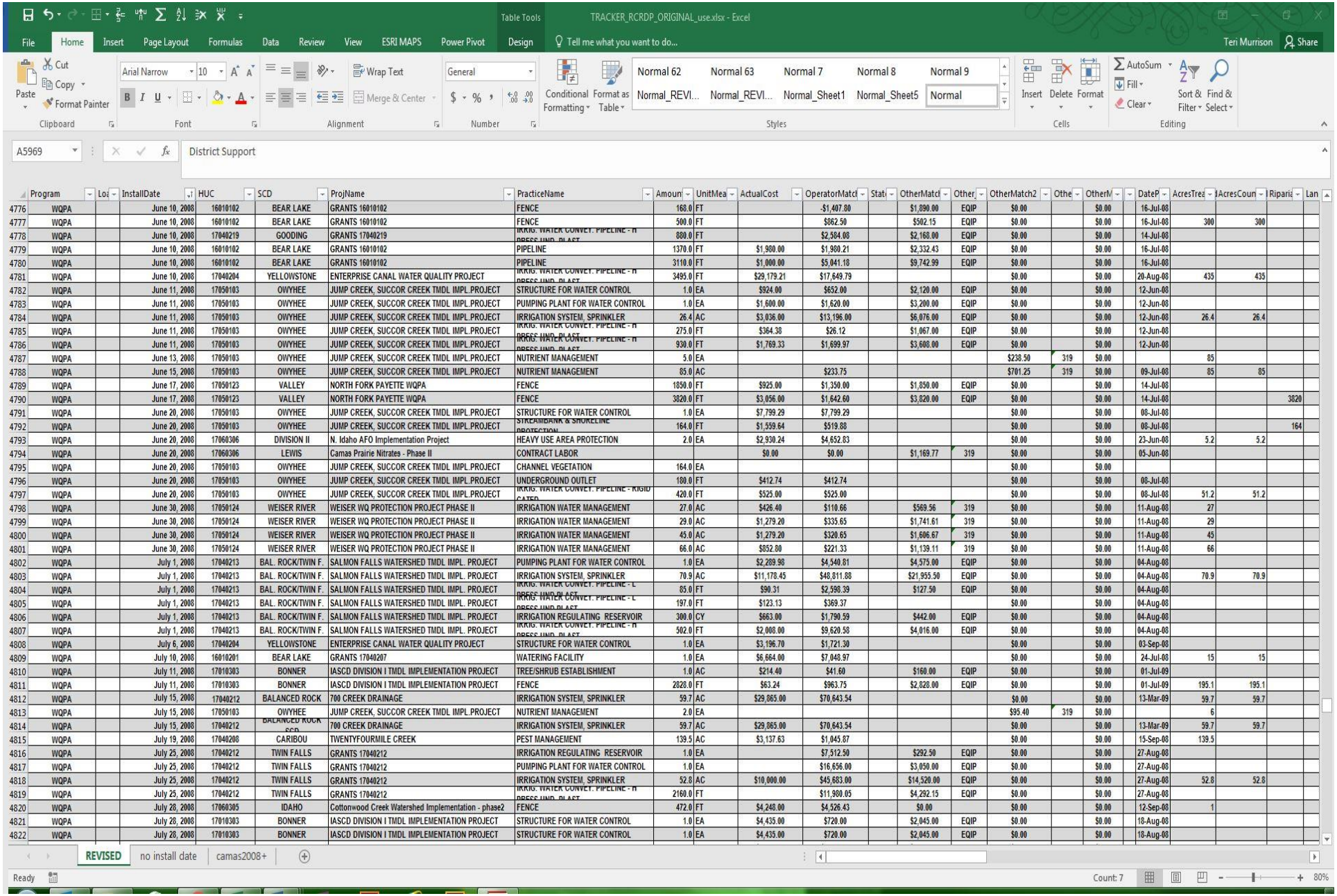
	Program	Loa	InstallDate	HUC	SCD	ProjName	PracticeName	Amoun	UnitMea	ActualCost	OperatorMatcl	Stat	OtherMatcl	Other	OtherMatch2	Othe	OtherM	DateP	AcresTrea	AcresCoun	Ripariz	Lan
3601	WQPA		April 1, 2006	17040210	EAST CASSIA	RAFT RIVER AT THE NARROWS RESTORATION PROJECT	IRRIGATION SYSTEM, SPRINKLER	353.0	AC	$148,347.00	$81,369.00		$99,944.00	EQIP	$0.00		$0.00	23-May-06	353	353		
3602	WQPA		April 1, 2006	17060306	NEZ PERCE	BIG CANYON CREEK	RESIDUE MANAGEMENT, DIRECT SEED	511.6	AC	$5,115.80	$1,705.33				$0.00		$0.00	28-Jun-06	511.6			
3603	WQPA		April 1, 2006	17060306	NEZ PERCE	NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO	RESIDUE MANAGEMENT, DIRECT SEED	511.6	AC	$5,115.80	$1,705.33				$0.00		$0.00	28-Jun-06	511.6			
3604	RCRDP	A-477	April 1, 2006	17040221	WOOD RIVER		PIPELINE-516	1080.0	0	29,304.36												
3605	WQPA		April 7, 2006	17060306	LEWIS	Camas Prairie Ground Water Nitrate Area	NUTRIENT MANAGEMENT	983.6	AC	$0.00	$1,229.51		$3,688.49	319	$0.00		$0.00	10-Jul-06	983.6	23.9		
3606	WQPA		April 9, 2006	17060108	LATAH	COW CREEK WATER QUALITY IMPROVEMENT	FILTER STRIP	0.5	AC		$149.60		$448.80	319	$0.00		$0.00	29-Apr-06	0.5	0.5		
3607	RCRDP	A-455	April 9, 2006	17040221	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER-442	240.0	60	68,200.00												
3608	WQPA		April 11, 2006	17060108	LATAH	COW CREEK WATER QUALITY IMPROVEMENT	FILTER STRIP	0.5	AC		$84.15		$252.45	319	$0.00		$0.00	29-Apr-06	0.5	0.5		
3609	RCRDP	A-409	April 11, 2006	16010202	FRANKLIN		PIPELINE-430	13733.0	FT	750,000.00												
3610	RCRDP	A-399	April 19, 2006	17050201	WEISER RIVER		IRRIGATION SYSTEM, SPRINKLER-442	0.0	0	50,900.00												
3611	WQPA		April 25, 2006	17040203	YELLOWSTONE	ASHTON GROUNDWATER PROTECTION PROJECT	NUTRIENT MANAGEMENT	753.0	AC	$3,765.00	$1,257.51				$0.00		$0.00	14-Jun-06	753	151		
3612	WQPA		April 26, 2006	17040203	YELLOWSTONE	ASHTON GROUNDWATER PROTECTION PROJECT	NUTRIENT MANAGEMENT	666.0	AC	$3,330.00	$1,112.22				$0.00		$0.00	07-Jun-06	666	44		
3613	WQPA		April 28, 2006	17040212	BALANCED ROCK	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	33.0	AC	$16,255.13	$16,255.13				$0.00		$0.00	5/26/2006	33	33		
3614	WQPA		April 28, 2006	17040219	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER	33.0	AC	$16,255.14	$16,255.13				$0.00		$0.00	26-May-06	33	33		
3615	RCRDP	A-458	April 28, 2006	17050101	ELMORE		IRRIGATION SYSTEM, SPRINKLER-442	65.0	1,430.00	45,000.00												
3616	WQPA		April 30, 2006	17050122	GEM	Lower Payette River Project	STRUCTURE FOR WATER CONTROL	1.0	EA	$123.75	$612.84		$495.00	319	$0.00		$0.00	06-Jun-06				
3617	WQPA		May 1, 2006	17060306	NEZ PERCE	NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO	FENCE	112.0	FT	$336.00	$134.40		$873.60	PL-566	$0.00		$0.00	20-Jul-06				
3618	WQPA		May 1, 2006	17060306	NEZ PERCE	NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO	HEAVY USE AREA PROTECTION	1.0	EA	$200.00	$80.00		$520.00	PL-566	$0.00		$0.00	20-Jul-06				
3619	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	SEDIMENT BASIN	1.0	EA	$212.16	$141.44		$1,060.80	319	$0.00		$0.00	07-Nov-06				
3620	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	SEDIMENT BASIN	1.0	EA	$279.69	$186.48		$1,398.45	319	$0.00		$0.00	09-Nov-06				
3621	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	SEDIMENT BASIN	1.0	EA	$329.93	$219.95		$1,649.64	319	$0.00		$0.00	31-Oct-06				
3622	WQPA		May 1, 2006	17060306	NEZ PERCE	NEZ PERCE RIPARIAN & LIVESTOCK FEEDING AREA PRO	WATERING FACILITY	1.0	EA	$1,170.32	$468.13		$3,042.83	PL-566	$0.00		$0.00	20-Jul-06				
3623	WQPA		May 1, 2006	17040221	WOOD RIVER	GRANTS 17040221	PUMPING PLANT FOR WATER CONTROL	1.0	EA	$2,750.00	$911.00		$2,925.00	EQIP	$0.00		$0.00	15-Dec-06				
3624	WQPA		May 1, 2006	17040210	EAST CASSIA	GRANTS 17040210	PUMPING PLANT FOR WATER CONTROL	1.0	EA		$6,525.00		$15,488.24	EQIP	$0.00		$0.00	19-Jun-06				
3625	WQPA		May 1, 2006	17040212	TWIN FALLS	GRANTS 17040212	PUMPING PLANT FOR WATER CONTROL	1.0	EA	$10,000.00	$23,234.00				$9,187.00	319	$0.00	31-May-06	3	3		
3626	WQPA		May 1, 2006	17040203	YELLOWSTONE	ASHTON GROUNDWATER PROTECTION PROJECT	NUTRIENT MANAGEMENT	1667.0	AC	$8,335.00	$2,778.33				$0.00		$0.00	14-Jun-06	1667	1667		
3627	WQPA		May 1, 2006	17050122	GEM	Lower Payette River Project	STRUCTURE FOR WATER CONTROL	2.0	EA	$36.92	$0.00		$1,620.00	319	$0.00		$0.00	06-Jun-06				
3628	WQPA		May 1, 2006	16010201	BEAR LAKE	GRANTS 16010201	CRITICAL AREA PLANTING	10.0	AC	$202.00	$202.00				$0.00		$0.00	27-Nov-06	10	10		
3629	WQPA		May 1, 2006	17050122	GEM	Lower Payette River Project	IRRIGATION SYSTEM, SURFACE & SUBSURFACE	9.0	AC	$1,291.95	$2,153.25		$5,167.80	319	$0.00		$0.00	06-Jun-06	9	9		
3630	WQPA		May 1, 2006	17040221	WOOD RIVER	GRANTS 17040221	IRRIGATION SYSTEM, SPRINKLER	38.0	AC	$5,000.00	$6,084.00		$19,950.00	EQIP	$0.00		$0.00	15-Dec-06	38	38		
3631	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	NUTRIENT MANAGEMENT	46.0	AC	$18.00	$12.00		$90.00	319	$0.00		$0.00	31-Oct-06	46			
3632	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	IRRIGATION WATER MANAGEMENT	46.0	AC	$120.00	$80.00		$600.00	319	$0.00		$0.00	31-Oct-06	46			
3633	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	IRRIGATION WATER MANAGEMENT	50.0	AC	$30.00	$20.00		$150.00	319	$0.00		$0.00	04-Oct-06	50			
3634	WQPA		May 1, 2006	17050201	WEISER RIVER	WEISER WATER QUALITY PROTECTION PROJECT	NUTRIENT MANAGEMENT	50.0	AC	$51.90	$34.60		$259.50	319	$0.00		$0.00	31-Oct-06	50			
3635	WQPA		May 1, 2006	17050122	GEM	Lower Payette River Project	FENCE	232.0	FT	$31.32	$354.18		$125.28	319	$0.00		$0.00	06-Jun-06				
3636	WQPA		May 1, 2006	17040219	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER	66.0	AC	$33,000.00	$60,957.07				$0.00		$0.00	16-Jun-06	66	66		
3637	WQPA		May 1, 2006	17050122	GEM	Lower Payette River Project	IRRIG. WATER CONVEY. PIPELINE - L PRESS UND PLAST	520.0	FT	$609.96	$1,016.60		$2,439.84	319	$0.00		$0.00	06-Jun-06	15.4	15.4		
3638	WQPA		May 1, 2006	17040219	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER	73.8	AC	$40,590.00	$47,895.02				$0.00		$0.00	23-Jun-06	73.8	73.8		
3639	WQPA		May 1, 2006	17050122	GEM	Lower Payette River Project	IRRIG. WATER CONVEY. PIPELINE - REINF PLAST MORTAR	1370.0	FT	$1,654.09	$2,756.80		$6,616.36	319	$0.00		$0.00	06-Jun-06				
3640	WQPA		May 1, 2006	17040219	WOOD RIVER		IRRIGATION SYSTEM, SPRINKLER	89.5	AC	$38,246.20	$38,246.19				$0.00		$0.00	16-Jun-06	89.5	89.5		
3641	WQPA		May 1, 2006	17060202	CUSTER	GRANTS 17060202	IRRIGATION SYSTEM, SPRINKLER	94.0	AC	$10,000.00	$58,511.00				$0.00		$0.00	12-Jun-06	94	94		
3642	WQPA		May 1, 2006	17040212	BALANCED ROCK	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	66.0	AC	$33,000.00	$60,957.07				$0.00		$0.00	6/16/2006	66	66		
3643	WQPA		May 1, 2006	17040212	BALANCED ROCK	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	73.8	AC	$40,590.00	$47,895.02				$0.00		$0.00	6/23/2006	73.8	73.8		
3644	WQPA		May 1, 2006	17040210	EAST CASSIA	GRANTS 17040210	IRRIGATION SYSTEM, SPRINKLER	254.0	AC	$10,000.00	$70,652.59		$88,927.00	EQIP	$0.00		$0.00	19-Jun-06	254	254		
3645	WQPA		May 1, 2006	17040212	BALANCED ROCK	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	89.5	AC	$38,246.20	$38,246.19				$0.00		$0.00	6/16/2006	89.5	89.5		
3646	WQPA		May 1, 2006	17040221	WOOD RIVER	GRANTS 17040221	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND PLAST	792.0	FT	$2,250.00	$6,588.10		$3,157.50	EQIP	$0.00		$0.00	15-Dec-06				
3647	WQPA		May 1, 2006	17050124	WEISER RIVER	GRANTS 17050124	IRRIG. WATER CONVEY. PIPELINE - H	895.0	FT		$2,828.30		$3,302.45	EQIP	$0.00		$0.00	12-Jun-06				



	Program	Loa	InstallDate	HUC	SCD	ProjName	PracticeName	Amoun	UnitMea	ActualCost	OperatorMatch	Stat	OtherMatch	Other	OtherMatch2	Othe	OtherM	DateP	AcresTrea	AcresCoun	Ripariа	Lan
4776	WQPA		June 10, 2008	16010102	BEAR LAKE	GRANTS 16010102	FENCE	168.0	FT		-$1,407.80		$1,890.00	EQIP	$0.00		$0.00	16-Jul-08				
4777	WQPA		June 10, 2008	16010102	BEAR LAKE	GRANTS 16010102	FENCE	500.0	FT		$862.50		$502.15	EQIP	$0.00		$0.00	16-Jul-08	300	300		
4778	WQPA		June 10, 2008	17040219	GOODING	GRANTS 17040219	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	880.0	FT		$2,584.08		$2,168.00	EQIP	$0.00		$0.00	14-Jul-08				
4779	WQPA		June 10, 2008	16010102	BEAR LAKE	GRANTS 16010102	PIPELINE	1370.0	FT	$1,980.00	$1,980.21		$2,332.43	EQIP	$0.00		$0.00	16-Jul-08				
4780	WQPA		June 10, 2008	16010102	BEAR LAKE	GRANTS 16010102	PIPELINE	3110.0	FT	$1,000.00	$5,041.18		$9,742.99	EQIP	$0.00		$0.00	16-Jul-08				
4781	WQPA		June 10, 2008	17040204	YELLOWSTONE	ENTERPRISE CANAL WATER QUALITY PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	3495.0	FT	$29,179.21	$17,649.79				$0.00		$0.00	20-Aug-08	435	435		
4782	WQPA		June 11, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	STRUCTURE FOR WATER CONTROL	1.0	EA	$924.00	$652.00		$2,120.00	EQIP	$0.00		$0.00	12-Jun-08				
4783	WQPA		June 11, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	PUMPING PLANT FOR WATER CONTROL	1.0	EA	$1,600.00	$1,620.00		$3,200.00	EQIP	$0.00		$0.00	12-Jun-08				
4784	WQPA		June 11, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIGATION SYSTEM, SPRINKLER	26.4	AC	$3,036.00	$13,196.00		$6,076.00	EQIP	$0.00		$0.00	12-Jun-08	26.4	26.4		
4785	WQPA		June 11, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	275.0	FT	$364.38	$26.12		$1,067.00	EQIP	$0.00		$0.00	12-Jun-08				
4786	WQPA		June 11, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	930.0	FT	$1,769.33	$1,699.97		$3,600.00	EQIP	$0.00		$0.00	12-Jun-08				
4787	WQPA		June 13, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	NUTRIENT MANAGEMENT	5.0	EA						$238.50	319	$0.00		85			
4788	WQPA		June 15, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	NUTRIENT MANAGEMENT	85.0	AC		$233.75				$701.25	319	$0.00	09-Jul-08	85	85		
4789	WQPA		June 17, 2008	17050123	VALLEY	NORTH FORK PAYETTE WQPA	FENCE	1850.0	FT	$925.00	$1,350.00		$1,850.00	EQIP	$0.00		$0.00	14-Jul-08				
4790	WQPA		June 17, 2008	17050123	VALLEY	NORTH FORK PAYETTE WQPA	FENCE	3820.0	FT	$3,056.00	$1,642.60		$3,820.00	EQIP	$0.00		$0.00	14-Jul-08			3820	
4791	WQPA		June 20, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	STRUCTURE FOR WATER CONTROL	1.0	EA	$7,799.29	$7,799.29				$0.00		$0.00	08-Jul-08				
4792	WQPA		June 20, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	SAGEBRUSH & SHORELINE PROTECTION	164.0	FT	$1,559.64	$519.88				$0.00		$0.00	08-Jul-08			164	
4793	WQPA		June 20, 2008	17060306	DIVISION II	N. Idaho AFO Implementation Project	HEAVY USE AREA PROTECTION	2.0	EA	$2,930.24	$4,652.83				$0.00		$0.00	23-Jun-08	5.2	5.2		
4794	WQPA		June 20, 2008	17060306	LEWIS	Camas Prairie Nitrates - Phase II	CONTRACT LABOR			$0.00	$0.00		$1,169.77	319	$0.00		$0.00	05-Jun-08				
4795	WQPA		June 20, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	CHANNEL VEGETATION	164.0	EA						$0.00		$0.00					
4796	WQPA		June 20, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	UNDERGROUND OUTLET	180.0	FT	$412.74	$412.74				$0.00		$0.00	08-Jul-08				
4797	WQPA		June 20, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	IRRIG. WATER CONVEY. PIPELINE - RIGID CATED	420.0	FT	$525.00	$525.00				$0.00		$0.00	08-Jul-08	51.2	51.2		
4798	WQPA		June 30, 2008	17050124	WEISER RIVER	WEISER WQ PROTECTION PROJECT PHASE II	IRRIGATION WATER MANAGEMENT	27.0	AC	$426.40	$110.66		$569.56	319	$0.00		$0.00	11-Aug-08	27			
4799	WQPA		June 30, 2008	17050124	WEISER RIVER	WEISER WQ PROTECTION PROJECT PHASE II	IRRIGATION WATER MANAGEMENT	29.0	AC	$1,279.20	$335.65		$1,741.61	319	$0.00		$0.00	11-Aug-08	29			
4800	WQPA		June 30, 2008	17050124	WEISER RIVER	WEISER WQ PROTECTION PROJECT PHASE II	IRRIGATION WATER MANAGEMENT	45.0	AC	$1,279.20	$320.65		$1,606.67	319	$0.00		$0.00	11-Aug-08	45			
4801	WQPA		June 30, 2008	17050124	WEISER RIVER	WEISER WQ PROTECTION PROJECT PHASE II	IRRIGATION WATER MANAGEMENT	66.0	AC	$852.80	$221.33		$1,139.11	319	$0.00		$0.00	11-Aug-08	66			
4802	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	PUMPING PLANT FOR WATER CONTROL	1.0	EA	$2,289.98	$4,540.81		$4,575.00	EQIP	$0.00		$0.00	04-Aug-08				
4803	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	IRRIGATION SYSTEM, SPRINKLER	70.9	AC	$11,178.45	$48,811.88		$21,955.50	EQIP	$0.00		$0.00	04-Aug-08	70.9	70.9		
4804	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	IRRIG. WATER CONVEY. PIPELINE - L PRESS UND. PLAST	85.0	FT	$90.31	$2,598.39		$127.50	EQIP	$0.00		$0.00	04-Aug-08				
4805	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	IRRIG. WATER CONVEY. PIPELINE - L PRESS UND. PLAST	197.0	FT	$123.13	$369.37				$0.00		$0.00	04-Aug-08				
4806	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	IRRIGATION REGULATING RESERVOIR	300.0	CY	$663.00	$1,790.59		$442.00	EQIP	$0.00		$0.00	04-Aug-08				
4807	WQPA		July 1, 2008	17040213	BAL. ROCK/TWIN F.	SALMON FALLS WATERSHED TMDL IMPL. PROJECT	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	502.0	FT	$2,008.00	$9,620.58		$4,016.00	EQIP	$0.00		$0.00	04-Aug-08				
4808	WQPA		July 6, 2008	17040204	YELLOWSTONE	ENTERPRISE CANAL WATER QUALITY PROJECT	STRUCTURE FOR WATER CONTROL	1.0	EA	$3,196.70	$1,721.30				$0.00		$0.00	03-Sep-08				
4809	WQPA		July 10, 2008	16010201	BEAR LAKE	GRANTS 17040207	WATERING FACILITY	1.0	EA	$6,664.00	$7,048.97				$0.00		$0.00	24-Jul-08	15	15		
4810	WQPA		July 11, 2008	17010303	BONNER	IASCD DIVISION I TMDL IMPLEMENTATION PROJECT	TREE/SHRUB ESTABLISHMENT	1.0	AC	$214.40	$41.60		$160.00	EQIP	$0.00		$0.00	01-Jul-09				
4811	WQPA		July 11, 2008	17010303	BONNER	IASCD DIVISION I TMDL IMPLEMENTATION PROJECT	FENCE	2828.0	FT	$63.24	$963.75		$2,828.00	EQIP	$0.00		$0.00	01-Jul-09	195.1	195.1		
4812	WQPA		July 15, 2008	17040212	BALANCED ROCK	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	59.7	AC	$29,865.00	$70,643.54				$0.00		$0.00	13-Mar-09	59.7	59.7		
4813	WQPA		July 15, 2008	17050103	OWYHEE	JUMP CREEK, SUCCOR CREEK TMDL IMPL.PROJECT	NUTRIENT MANAGEMENT	2.0	EA						$95.40	319	$0.00		6			
4814	WQPA		July 15, 2008	17040212	BALANCED ROCK SCD	700 CREEK DRAINAGE	IRRIGATION SYSTEM, SPRINKLER	59.7	AC	$29,865.00	$70,643.54				$0.00		$0.00	13-Mar-09	59.7	59.7		
4815	WQPA		July 19, 2008	17040208	CARIBOU	TWENTYFOURMILE CREEK	PEST MANAGEMENT	139.5	AC	$3,137.63	$1,045.87				$0.00		$0.00	15-Sep-08	139.5			
4816	WQPA		July 25, 2008	17040212	TWIN FALLS	GRANTS 17040212	IRRIGATION REGULATING RESERVOIR	1.0	EA		$7,512.50		$292.50	EQIP	$0.00		$0.00	27-Aug-08				
4817	WQPA		July 25, 2008	17040212	TWIN FALLS	GRANTS 17040212	PUMPING PLANT FOR WATER CONTROL	1.0	EA		$16,656.00		$3,050.00	EQIP	$0.00		$0.00	27-Aug-08				
4818	WQPA		July 25, 2008	17040212	TWIN FALLS	GRANTS 17040212	IRRIGATION SYSTEM, SPRINKLER	52.8	AC	$10,000.00	$45,683.00		$14,520.00	EQIP	$0.00		$0.00	27-Aug-08	52.8	52.8		
4819	WQPA		July 25, 2008	17040212	TWIN FALLS	GRANTS 17040212	IRRIG. WATER CONVEY. PIPELINE - H PRESS UND. PLAST	2160.0	FT		$11,980.05		$4,292.15	EQIP	$0.00		$0.00	27-Aug-08				
4820	WQPA		July 28, 2008	17060305	IDAHO	Cottonwood Creek Watershed Implementation - phase2	FENCE	472.0	FT	$4,248.00	$4,526.43		$0.00		$0.00		$0.00	12-Sep-08	1			
4821	WQPA		July 28, 2008	17010303	BONNER	IASCD DIVISION I TMDL IMPLEMENTATION PROJECT	STRUCTURE FOR WATER CONTROL	1.0	EA	$4,435.00	$720.00		$2,045.00	EQIP	$0.00		$0.00	18-Aug-08				
4822	WQPA		July 28, 2008	17010303	BONNER	IASCD DIVISION I TMDL IMPLEMENTATION PROJECT	STRUCTURE FOR WATER CONTROL	1.0	EA	$4,435.00	$720.00		$2,045.00	EQIP	$0.00		$0.00	18-Aug-08				

ITEM #4f

MEMO

TO: CHAIRMAN WRIGHT AND COMMISSIONERS TREBESCH, SLICHTER, ROEMER, AND RADFORD
FROM: TERI MURRISON, ADMINISTRATOR
DATE: April 5, 2018
RE: FY 2019-2022 STRATEGIC PLAN UPDATE

The Commission is required by statute to submit an updated and adopted Strategic Plan annually to serve as a guidance document for the agency over next four years. This year's draft has been modified to address last year's performance measurements, and to add additional tasks (identified by Track Changes in the attached draft Plan). The Leadership Team has reviewed and made some adjustments to the benchmarks, as well.

After your review, a copy of the attached Draft Strategic Plan can be further amended before being distributed to the Strategic Plan District & Partner Review Committee (Steve Becker, Art Beal, Dennis Tanikuni, Benjamin Kelly, and Chris Simons). Once they have suggested changes and commented, staff will return the draft to your Board for further direction at the May meeting.

Districts will receive a final draft of the revised Strategic Plan after your meeting in May and will be asked to comment and make suggestions. Final adoption of the Plan will take place at your June meeting. The Board is required to adopt the Strategic Plan at your June meeting to meet the July 1, 2017 deadline.

REQUESTED ACTION: For information only

Attachments:

- Draft FY 2019-2022 ISWCC Strategic Plan

FY 2019-2022 Strategic Plan

Conservation the Idaho Way: sowing seeds of stewardship

IDAHO SOIL & WATER CONSERVATION COMMISSION

322 E. Front Street

Suite 560

Boise, Idaho 83702

208.322.1790

info@swc.idaho.gov

FY 2019-2022 Strategic Plan

CONSERVATION THE IDAHO WAY

Private lands – forest, range, and croplands - care for 71% of the lower 48 states, 82% of wetlands, and 80% of endangered species. They support urban areas, agriculture, provide energy and transportation corridors, habitat for fish and wildlife, and contribute to water quality goals. In Idaho, just under 30% of all lands are privately-owned. They're in large part responsible for the health of the economy and steward much of our natural resources.

Conservation the Idaho Way is locally led agricultural stewardship on private lands. It depends on voluntary actions – projects that improve water quality, restore streams, rivers, forest, range, and croplands, and contribute to healthy soils. It balances our economic health with that of our natural resources, and helps satisfy environmental laws and regulations.

MISSION

We facilitate coordinated non-regulatory, voluntary, and locally-led conservation by federal, state, and local governments including Idaho's conservation districts and other partners to conserve, sustain, improve, and enhance soil, water, air, plant, and animal resources. (IC 27:22)

SLOGAN

Conservation the Idaho Way: sowing seeds of stewardship

VISION

Conservation in Idaho reflects locally-led natural resource conservation leadership and priorities, is voluntary and incentive-based, non-regulatory, and demonstrates scientifically sound stewardship. The Conservation Commission and local conservation districts are the primary entities to lead coordinated conservation efforts with partners to provide landowners and land-users with assistance and solutions for natural resource concerns and issues.

GUIDING PRINCIPLES

- Address legislative intent and statute
- Benefit the environment and Idaho's agricultural-based economy
- Benefit conservation districts' locally led, voluntary, non-regulatory priorities and projects
- Benefit the Commission's ability to serve and meet statutory authorities
- Promote fiscal responsibility
- Strengthen existing and build new conservation partnerships
- Incorporate valid scientific data and practices
- Benefit conservation work on natural resource priority issue areas
- Promote established and innovative conservation measures

FY 2019-2022 STRATEGIC PLAN

CORE FUNCTIONS

The Conservation Commission focuses on three core functions under Idaho Code Title 22, Ch. 2700 et seq:

1. Providing support to Idaho's 50 locally-led conservation districts.

2. Providing incentive-based and general voluntary conservation programs and services.

3. Conducting outreach and communications to educate and inform the public, decision makers, partners, and other stakeholders.

KEY EXTERNAL FACTORS

There are key external factors that could affect the agency's ability to meet the goals and objectives contained in this Strategic Plan. They include:

- Availability of funding.
- Changing demographics and land use designations.
- State and federal regulatory pressure and mandates that could shift priorities and resources away from current activities.
- Changing economics and pressures of agricultural and natural resource dependent industries which could result in significant increases or decreases in conservation program participation.
- Changing economics of local, state, and federal budgets, which could result in reductions in agency personnel/services and/or fewer conservation dollars.

FY 2019-2022 Strategic Plan

CORE FUNCTIONS & KEY PERFORMANCE MEASURES

Performance Measures were developed based on internal targets established to improve customer service. They were initially developed with key legislators and partners in conjunction with Commissioners and staff. Benchmarks/quantifiable targets were further refined in this Plan after review of past years' performance and the potential occurrence of key external factors. They are measured annually at the completion of each fiscal year.

FY ~~2018~~ 2019 GOALS	FY ~~2018~~ 2019 OBJECTIVES	FY ~~2018~~ 2019 KEY PERFORMANCE MEASURES	FY ~~2018~~ 2019 PERFORMANCE MEASURES/BENCHMARKS
1. **Support Districts' voluntary conservation efforts**	**Provide and implement districts with financial, technical, and capacity building assistance**	▪ Conduct annual survey to identify satisfaction with services & programs	▪ % of districts satisfied with services & programs ○ ~~36~~50% strongly agree ○ ~~46~~46% somewhat agree ○ ~~8~~2% neutral ○ ~~8~~2% somewhat disagree ○ ~~2~~0% disagree ○ 0% N/A
		▪ Assist in updating 5-Year Plans	▪ 50 of 50 district 5-Year Plans updated
		▪ Conduct annual technical & comprehensive assistance request process, assign field staff, include reasonable/flexible amount of discretionary time	▪ Quantify and track assistance provided ▪ Serve 50 districts through the provision of financial assistance ▪ ~~# of~~ 7,400/6,100 technical assistance hours requested/awarded ▪ serve 40 districts with projects ▪ initiate 50 new projects ▪ work on ~~75~~ 100 ongoing projects ▪ ~~245~~ 300 landowners served
2. **Provide Conservation Programs & Services**	**Provide and implement Incentive-Based Programs**	**Resource Conservation & Rangeland Development Program (RCRDP)** Make low interest conservation loans	▪ Quantify and track: ▪ 65 loan inquiries/landowners served ▪ 15 new loans ▪ $~~900,000~~850,000 ~~0~~ in new loans ▪ 28 applications submitted ~~▪ No more than 2 loan applications pending at end of FY~~ ~~▪ No more than 5 loan applications denied or withdrawn~~ ▪ Streamline application process, review and revise Rules, as needed

FY 2019-2022 Strategic Plan

FY ~~2018~~ 2019 GOALS	FY ~~2018~~ 2019 OBJECTIVES	FY ~~2018~~ 2019 KEY PERFORMANCE MEASURES	FY ~~2018~~ 2019 PERFORMANCE MEASURES/BENCHMARKS
		Conservation Reserve Enhancement Program (CREP) Provide technical leadership and oversight to reduce ground water use, improve water quantity and quality, enhance wildlife habitat, and decrease the risk of agriculture-related chemical and sediment runoff in Eastern Snake Plain Aquifer.	▪ Quantify & track: ▪ ~~160~~ 184 contracts ▪ ~~22,000~~~~17,500~~18,331 total acres under contract ▪ ~~10~~ 23 contracts certified (achieving program goals) ▪ ~~1,500~~~~800~~3,254 certified acres ▪ ~~36,00~~36,660 acre ft. water conserved
	Provide and implement General Conservation Programs & Services	**Total Maximum Daily Load (TMDL) Implementation Planning Program** – subject to DEQ priorities, write plans/ designated lead for voluntary ag/grazing projects on listed/impaired waterways	▪ Quantify & track: ▪ ~~# of~~5 new plans assigned by DEQ ▪ ~~7~~ 5 plans completed ▪ ~~15~~ 12 in progress ▪ ~~18~~ 19 pending
		Ground Water Quality/Nitrate Priority Areas - Facilitate cooperative ground water protection, promote and support implementation of water quality projects to maintain and enhance ground water quality	▪ Quantify & track: ▪ ~~42,000~~37,700 acres treated ▪ ~~140,000~~132,100 pounds nitrates reduced ▪ ~~28,000~~26,500 pounds phosphorus reduced ▪ ~~150,000~~142,600 tons sediment reduced (tons)

FY 2019-2022 Strategic Plan

FY ~~2018~~ 2019 GOALS	FY ~~2018~~ 2019 OBJECTIVES	FY ~~2018~~ 2019 KEY PERFORMANCE MEASURES	FY ~~2018~~ 2019 PERFORMANCE MEASURES/BENCHMARKS
3. Build Support for Voluntary Conservation	**Provide and implement outreach and communication** educate/inform public, decision makers, partners, and other stakeholders	Maintain Facebook & Twitter content about voluntary conservation activities of Commission and districts Update Tracker statistical database, create online, map-based reporting site,	▪ Quantify: ▪ 1,100,000 annual website total hits ▪ 275 Facebook posts ▪ 100 new page likes ▪ 75 tweets on Twitter ▪ 200 new followers Embedded map on website reporting conservation data statistics from upated Tracker system, ongoing maintenance
		Publish monthly newsletter about voluntary conservation activities of Commission and districts	▪ 675 newsletter subscriptions
		Co-produce video on Commission and district accomplishments for 2018 Legislative Session, funding permitting	• 1 7-9 minute video about Commission and district accomplishments, funding permitting • Present to 5 germane legislative committees

ADOPTION OF CYBERSECURITY FRAMEWORK AND IMPLEMENTATION OF CONTROLS

Addendum to Agency Strategic Plans: Adoption of the NIST Cybersecurity Framework and Implementation of CIS Critical Security Controls 1 – 5.

As a technology customer of the Office of the Chief Information Officer (OCIO) in the Department of Administration, we are using the cybersecurity systems and technical expertise in OCIO to fulfill requirements related to Executive Order 2017-02. Staff from OCIO briefed the NIST Core Framework, CIS Controls 1-5, and their plan for adoption of the NIST Cybersecurity Framework in a customer meeting on Feb 23, 2017. Key actions by our organization to support OCIO cybersecurity efforts are to *Identify* (NIST Core Framework first function) critical data in our systems to OCIO. Identifying sensitive data allows OCIO to address the other NIST Core Framework functions: Protect, Detect, Respond, and Recover. We will also participate in DHR and OCIO administered cybersecurity training, as awareness is a critical component of an effective cybersecurity program. As briefed by OCIO staff, implementation of the CIS Controls 1-5 will be their responsibility for the systems they operate and, as technological tools applied to the computer systems, largely invisible to us as a customer.

FY 2019-2022 Strategic Plan

Conservation the Idaho Way: sowing seeds of stewardship

C.L. "Butch" Otter, Governor

Board
H. Norman Wright, Chairman
Gerald Trebesch, Vice Chair
Leon Slichter, Secretary
Dave Radford, Board Member
Cathy Roemer, Board Member

Teri Murrison, Administrator

Idaho Soil & Water Conservation Commission

322 E. Front Street, Suite 560
Boise, ID 83702
208-332-1790
www.swc.idaho.gov

IDAHO SOIL & WATER
CONSERVATION COMMISSION

ITEM # 4g

TO: **CHAIRMAN WRIGHT AND COMMISSIONERS RADFORD, ROEMER, SLICHTER, AND TREBESCH**
FROM: **RHONDA YADON, FISCAL & HR MANAGER**
DATE: **MARCH 26, 2018**
RE: **FY 2019 APPROPRIATION AND BUDGET BLUEPRINT**

The Governor recently signed Senate Bill 1330, the Commission's FY 2019 Appropriations Bill (see attached). It appropriates $3,324,400 in FY 2019, and caps ISWCC's full-time authorized positions at 21.75. In addition to adjustments for health care, network, statewide cost allocation and such, the FY 2019 budget provides funding for the replacement of office phones, laptop hard drives, and an upgrade to our MS Office software. It also funds spending authority for .25 FTP of our Technical Records Specialist 2 (TRS2) and 3 FTPs for the Conservation Technical Assistants to be paid by the NRCS, 1 FTP for the Sagebrush Restoration Specialist to be paid by the NFWF, and a 3% ongoing salary increase for our employees to be distributed based on merit.

The Conservation Commission annually approves a Budget Blueprint for the appropriations of General and Dedicated funds. Attached is a draft FY 2019 Budget Blueprint recommendation for your consideration.

General Fund Draft Blueprint
Revenue: Appropriated General Fund revenue in FY 2019 totals $2,659,200. It includes $1,215,500 in Personnel funds, $187,300 in Operating funds, $3,200 in Capital funds, and $1,253,200 in Trustee and Benefit funds. FY 2013's additional $50,000 in Trustee & Benefit funds distributed under the match allocation formula is included as part of the Commission's Base FY 2018 funding, as are FY 2014's $50,000 and FY 2015's additional $50,000 (each year), which are allocated to districts equally.

Expenditures: General Fund budgeted expenditures in FY 2019 are forecasted to be $185,427. Personnel and Capital fund expenditures in FY 2019 equal the appropriated funds. Per Board policy, the draft Blueprint sets aside a modest $1,873 in Operating funds as a contingency. Under Trustee and Benefit funds, the draft Blueprint allocates $425,000 for Base funding, $678,200 for Match formula funding, $100,000 for Operating, and $50,000 for Capacity Building funding.

Since the estimated costs are not yet available, the attached draft Blueprint estimates SWCAP expenses (Controller's Office, Attorney General, etc.) to be $43,900. The draft Blueprint assumes roughly 50/50 cost sharing with the RCRDP fund for overhead expenses including our Memo of Understanding (MOU) with the Department of Administration for IT support.

The General Fund Budget draft Blueprint funds ISWCC staffing at 15.35 FTPs. It assumes some office staff spend .15 of an FTP assisting with RCRDP conservation planning and fiscal activities.

Dedicated Fund Draft Blueprint
Revenue: Dedicated Fund revenues are limited to cash on-hand and interest generated by both RCRDP and SRF loans, as well as one fund containing cost recovery for the provision of technical assistance provided to other agencies. In FY 2019, RCRDP cash on-hand is estimated to be no less than $6,940,656, which includes the potential cash outlay of $10,500 for the 1st installment payment for Tracker Services. Estimated interest income on the current loan portfolio will be approximately $189,200 (not including late interest, new loan activity, or early payoffs' impacts on interest generation). The total RCRDP Dedicated Fund balance will be approximately $7,129,856 in FY 2019. Cash on-hand at the beginning of FY 2019 in the Technical Assistance Cost Recovery Fund is projected to be $12,710. Potential income in that fund is $20,000, which would bring total funds to $32,710. Cash on-hand in the SRF Fund is forecast to be

$31,179, which includes the potential cash outlay of $24,500 for the 1st installment payment for Tracker Services and FY 2019 income of an additional $9,312. Total SRF cash on-hand and income generated in FY 2019 are estimated at $40,491.

Terry Hoebelheinrich prepared the below-referenced estimate of the interest to be generated along with a comparison to last year's interest estimate. He will be available at your meeting to discuss any questions you have about his projection (below):

$ 85,700	RCRDP (AVG 2.85%)
$103,500	IDLE TREASURY (AVG 1.50%)
$189,200	TOTAL

We would stress that while interest generated does not yet equal program expenses, continuing to be fiscally cautious while awaiting an upturn in loan activity and interest rates is the prudent course of action. For example, if state treasury rates go up by 1%, that would yield an approximate increase of interest income approaching $45,000.

Expenditures: Expenditures assume that the income identified in Revenues materializes, but if not, expenditures are estimated to equal income with the exception of the RCRDP fund. The draft Blueprint assumes that income generated through interest to the RCRDP fund increases, but does not cover the spending authority appropriation. See the attached FY 2019 RCRDP Estimated Interest Income. Loan officer Terry Hoebelheinrich will address that during the discussion of this item.

The RCRDP draft Blueprint assumes 2.15 full time staff persons (loan officer and loan servicing assistant, and .15 of office staff FTP). It also assumes costs incurred for meetings where RCRDP program business is conducted will be charged to that fund. Commissioner travel for regular Board Meetings and Administrator travel and training will assume roughly 50/50 cost sharing.

Since the estimated costs are not yet available, the attached draft Blueprint estimates SWCAP expenses (Controller's Office, Attorney General, etc.) to be roughly $43,900. The draft Blueprint assumes roughly 90/10 cost sharing with the RCRDP fund for overhead expenses including our MOU with the Department of Administration for IT support.

The Budget draft Blueprint for Dedicated Funds assumes the specified income will be realized in Technical Assistance Cost Recovery, however that may not be the case. Cash on-hand on at the beginning of FY 2019 will be approximately $12,710 and in addition, we may recover up to an additional $20,000 for engineering technical services. Regardless, the maximum spending authority in this fund is capped at $30,000 in FY 2019.

New this year is a one-time appropriation (for up to 3 years) for 3 FTP in the Federal Grant Fund of $185,400 to hire field office specialists to engage in Natural Resource Conservation Service work in addition to the on-going appropriation of $17,200 for .25 FTP to fund our TRS2 position by the NRCS. Another one-time appropriation (for up to 2 years) was also approved for 1 FTP in the Federal Grant Fund of $85,000 to hire a sagebrush restoration specialist to be paid by the National Fish and Wildlife Foundation.

The budgeted cost in the State Revolving Fund assumes that an amount roughly equal to 10% of the loan officer's salary will be charged to this fund to recoup RCRDP administrative costs. The balance of funds generated through this loan will continue to be held in contingency to build a modest reserve to preserve cash flow in this account should the borrower be late on payments.

ACTION: Approve FY 2019 General and Dedicated Fund Blueprints, including setting Trustee and Benefit fund distribution to districts in FY 2019 at: $425,000 in Base funding, $678,200 in Match Formula funding, $100,000 in Operating funding, and $50,000 for Capacity Building funding.

Attachment: SB 1330: FY 2019 ISWCC Appropriations Bill
FY 2019 Budget Draft Blueprint (General and Dedicated Funds)

LEGISLATURE OF THE STATE OF IDAHO
Sixty-fourth Legislature Second Regular Session - 2018

IN THE SENATE

SENATE BILL NO. 1330

BY FINANCE COMMITTEE

AN ACT

RELATING TO THE APPROPRIATION TO THE SOIL AND WATER CONSERVATION COMMISSION FOR FISCAL YEAR 2019; APPROPRIATING MONEYS TO THE SOIL AND WATER CONSERVATION COMMISSION FOR FISCAL YEAR 2019; LIMITING THE NUMBER OF AUTHORIZED FULL-TIME EQUIVALENT POSITIONS; AND PROVIDING LEGISLATIVE INTENT REGARDING TRUSTEE AND BENEFIT PAYMENTS DISTRIBUTION.

Be It Enacted by the Legislature of the State of Idaho:

SECTION 1. There is hereby appropriated to the Soil and Water Conservation Commission the following amounts to be expended for the designated expense classes from the listed funds for the period July 1, 2018, through June 30, 2019:

	FOR PERSONNEL COSTS	FOR OPERATING EXPENDITURES	FOR CAPITAL OUTLAY	FOR TRUSTEE AND BENEFIT PAYMENTS	TOTAL
FROM:					
General Fund	$1,215,500	$187,300	$3,200	$1,253,200	$2,659,200
Administration and Accounting Services Fund		30,000			30,000
Resource Conservation and Rangeland Development Fund	168,300	147,300	500		316,100
Clean Water Revolving Loan (SCC) Fund		30,000			30,000
Federal Grant Fund	271,600	17,500	0	0	289,100
TOTAL	$1,655,400	$412,100	$3,700	$1,253,200	$3,324,400

SECTION 2. FTP AUTHORIZATION. In accordance with Section 67-3519, Idaho Code, the Soil and Water Conservation Commission is authorized no more than twenty-one and seventy-five hundredths (21.75) full-time equivalent positions at any point during the period July 1, 2018, through June 30, 2019, unless specifically authorized by the Governor. The Joint Finance-Appropriations Committee will be notified promptly of any increased positions so authorized.

SECTION 3. TRUSTEE AND BENEFIT PAYMENTS DISTRIBUTION. It is the intent of the Legislature that $100,000 of the amount appropriated in Section 1 of

this act for trustee and benefit payments is to be distributed equally between the fifty (50) soil and water conservation districts in addition to the amounts authorized under Section 22-2727, Idaho Code.

FY 2019 IDAHO SOIL & WATER CONSERVATION COMMISSION

DRAFT General Fund Budget Blueprint

SB 1330	Personnel	Operating		Capital	Trustee & Benefit Funds (base, formula, & capacity building)	TOTAL APPROPRIATION
General Fund	$1,215,500	$187,300		$3,200	$1,253,200	$ 2,659,200

SWC Budget	Personnel	Operating	Contingency	Capital	District Allocations				TOTAL
					Base Funding	Match Funding	Operating Funding	Capacity Building	
	$1,215,500	$185,427	$1,873	$3,200	$425,000	$678,200	$100,000	$50,000	$2,659,200

Operating Highlights

Assumes rent in the Water Center until December 2018 at $3,605 per month and the remainder of the year at the increased rate per month of $3,656 (all shared between general fund and RCRDP).

Assumes SWCAP expenses including SCO, AG, STO estimated at $43 ,900

Assumes appropriate amount of SWCAP, administrative (including postage, phone, rent expense, etc.), and IT services charged to GF and RCRDP

Ongoing expenses for MOU with Admin for IT, assumed to increase $2,000 from FY 2018 actuals for internet and security

Assumes general fund pays 90% of NRCS desk space and federal IT support and RCRDP pays 10%

One-time operating expense of $5,100 for MS Office 365 and capital expense for office phone upgrades and laptop SSD hard drive upgrades charged to GF and dedicated funds.

Small 1% operating contingency budgeted. May increase with personnel or operating cost savings or from dedicated funds (excluding RCRDP fund)

Personnel Highlights

Assumes fully staffed in general fund at 15.5 FTPs (2 FTPs in RCRDP fund and 4.25 in federal fund), all projected personnel costs fall within budget with approx. $14k contingency

Assumes some related administrative time at 10% and fiscal time at 5% in RCRDP fund

Trustee/Benefits Highlights (District Allocations, Capacity Building)

Match Funding formula for FY 2019 is an estimated state match o f 1.14:1 based on FY 2016 local match funding (incl $50k cap).

DRAFT FY 2019 IDAHO SOIL & WATER CONSERVATION COMMISSION

Dedicated Funds Budget Blueprint

REVENUE	Approx. Cash on hand 7/1/2018	Est. FY 2019 Income	TOTAL Dedicated Funds
RCRDP	$6,940,656	$189,200	$7,129,856
Federal Grant Fund	$48,091	$241,009	$289,100
Tech Asst Cost Recovery	$12,710		$12,710
SRF Loan	$31,179	$9,312	$40,491

SPENDING AUTHORITY/ BUDGET	Personnel	Operating	Operating Contingency	Capital	TOTAL Spending Authority/Budgeted
RCRDP	$168,300	$147,300		$500	$316,100
Federal Grant Fund	$271,600	$17,500			$289,100
Tech Asst Cost Recovery		$30,000			$30,000
SRF Loan		$8,628	$21,372		$30,000
Total	$439,900	$203,428	$21,372	$500	$665,200

Revenue Highlights

Approx. cash on hand 7/1/2018 is based on actual cash on hand at 3/20/2018 less $35,000 for possible 1st installment purchase of Tracker Services (70% from SRF and 30% from RCRDP). Does not include estimate of interest generated in RCRDP and SRF during remainder of FY 2018 (TA Cost Recovery includes $1,482 for an anticipated DEQ reimbursement)

Est. FY 2018 Income includes earned interest on current portfolio (excludes RCRDP late interest, new loan activity, and early payoffs) and billing to OSC for TA Cost Recovery)

Operating Highlights

Assumes interest income generated to RCRDP fund increases in FY 2019, but income generated does not meet appropriated spending authority

Assumes SWCAP expenses including SCO, AG, STO estimated at $43,900

Assumes appropriate amount of SWCAP, administrative (including postage, phone, rent expense, etc.), and IT services charged to GF and RCRDP

Ongoing expenses for MOU with Admin for IT support assumed to match FY 2018 actuals

Assumes maximum income and expenditures under TA cost recovery

Assumes amount roughly equivalent to 10% of loan officer salary and benefits charged to SRF to cover administrative costs. Remainder held in contingency to cover late borrower payments, if necessary.

Assumes costs associated with meetings where RCRDP program or business conducted will be charged to RCRDP

Assumes 2.15 FTP RCRDP and office staff in RCRDP Loan Fund

Assumes .25 FTP of the Technical Records Specialist position and 3 FTPs for the Conservation Technical Assistants will be funded by the NRCS, and 1 FTP for the Sagebrush Restoration Specialist will be funded by the NFWF.

IDAHO SOIL & WATER CONSERVATION COMMISSION

ITEM #5a

MEMO

TO: CHAIRMAN WRIGHT, COMMISSIONERS ROEMER, RADFORD, SLICHTER, AND TREBESCH
FROM: TERRY HOEBELHEINRICH, LOAN OFFICER
DATE: March 21, 2018
RE: RESOURCE CONSERVATION AND RANGELAND DEVELOPMENT PROGRAM UPDATE

Since February 7, the following activities have been conducted by staff:

Marketing	• Attended Cassia/Minidoka SCD Soil Health Workshop • Attended Lewis SCD Soil Health Workshop • Attended East/West Side SCD Soil Health Workshop • Attended the Idaho Hay & Forage Conference in Burley • Future RCRDP Marketing Scheduled Idaho Family Forest Landowners Conference, Moscow.
Loan Inquiries & Applications	• 5 loan inquiries have been received since the last update dated February 7 (36 for FY18) • 1 new loan application received (17 for FY18)
Loans Approved	• 3 loans approved for $73,724,$26,214 & 26,000 (12, $1,013,498 for FY18) • $498,272 yet to be disbursed
Loan Portfolio	• 66 loans, $2,752,010 (end of February) • No delinquencies
Administrative	• Prepared and Submitted Administrative Rules Form to Division of Financial Management • Future Steps Include Preparing & Submitting a Notice of Intent to the Office of Administrative Rules.

ACTION: For information only

IDAHO SOIL & WATER
CONSERVATION COMMISSION

ITEM #5b

MEMO

TO: CHAIRMAN WRIGHT AND COMMISSIONERS RADFORD, ROEMER, SLICHTER, AND TREBESCH
FROM: TERRY HOEBELHEINRICH, LOAN OFFICER
DATE: MARCH 21, 2018
RE: ADMINISTRATIVE RULE CHANGE UPDATE

Since your last meeting staff has worked with counsel on the proposed Administrative Rule changes. Please see the attached PROPOSED RULEMAKING SCHEDULE.

The Administrative Rules Request Form has been completed and submitted to the Division of Financial Management for their review and approval.

ACTION: For Information Only

Attachment

- PROPOSED RULEMAKING SCHEDULE

PROPOSED RULEMAKING SCHEDULE

RCRDP Rules
Docket Number 60-0501-1801

Action	Date
Deadline AARF to DFM	**3/23/2018**
Deadline Notice of Intent to OAR	**4/6/18**
Notice posted in Bulletin	**5/2/18**
Negotiated Rulemaking Meeting	June
Deadline for Written Comments	10 days after meeting
Board Meeting approving proposed rules	End of July or August
Deadline Proposed Rules with Negotiated Ruling Summary to OAR	**8/31/2018**
Publication of Proposed Rule	**October 3, 2018**
21 Day Comment Period Runs	10/24/2018
Meeting on Proposed Rule if needed	End October beginning November
Board Meeting to consider and adopt pending rule	November
Deadline Pending Rule to OAR	**November 23, 2018**
Notice of Adoption of Pending Rule published in Bulletin	**January 2, 2019**
Pending rule becomes final and effective if approved by Legislature	2019 sine die

MEMO

TO: CHAIRMAN WRIGHT AND COMMISSIONERS TREBESCH, SLICHTER ROEMER, AND RADFORD
FROM: CHUCK PENTZER
DATE: April 5, 2018
RE: CREP ANNUAL REPORT

The Idaho Conservation Reserve Enhancement Program (CREP) is a part of the Conservation Reserve Program (CRP) operated by the Farm Service Agency (FSA). Partner state agencies include the Idaho Soil and Water Conservation Commission (ISWCC), the Idaho Department of Water Resources (IDWR), and the Idaho Department of Fish and Game (IDFG). The Idaho State Department of Agriculture (ISDA), and the Department of Environmental Quality (IDEQ), participate in an advisory capacity, serving as part of the CREP Working Group. The federal agency, Natural Resource Conservation Service, (NRCS) provides technical guidelines and information as well as providing important research from the Plant Materials Center in Aberdeen. Non-government entities such as the Idaho Ground Water Appropriators (IGWA) also contribute to this program by providing additional incentives for CREP enrollment to its members.

The main objective for CREP is to retire irrigated cropland to reduce ground water consumptive use and compliment other water saving efforts for the overall strategy to stabilize and replenish the ground water levels in the Eastern Snake Plain Aquifer. (ESPA) The program provides an annual rental payment over the 15-year contract term for every acre enrolled, helping to remove production risks, and provides protection from complete loss of income as well as safeguarding the water right, even when a mandatory curtailment is issued.

As the lead state agency, ISWCC prepares an annual report each year which highlights the activities and status of implementation, as well as matching efforts from State agencies. Staff will make a presentation at your meeting on the FY 2017 annual report covering activities from October 1, 2016 thru September 30, 2017. The report was submitted to the state FSA office on December 15, and forwarded to the Washington D.C. office.

REQUESTED ACTION: For information only

Attachments:

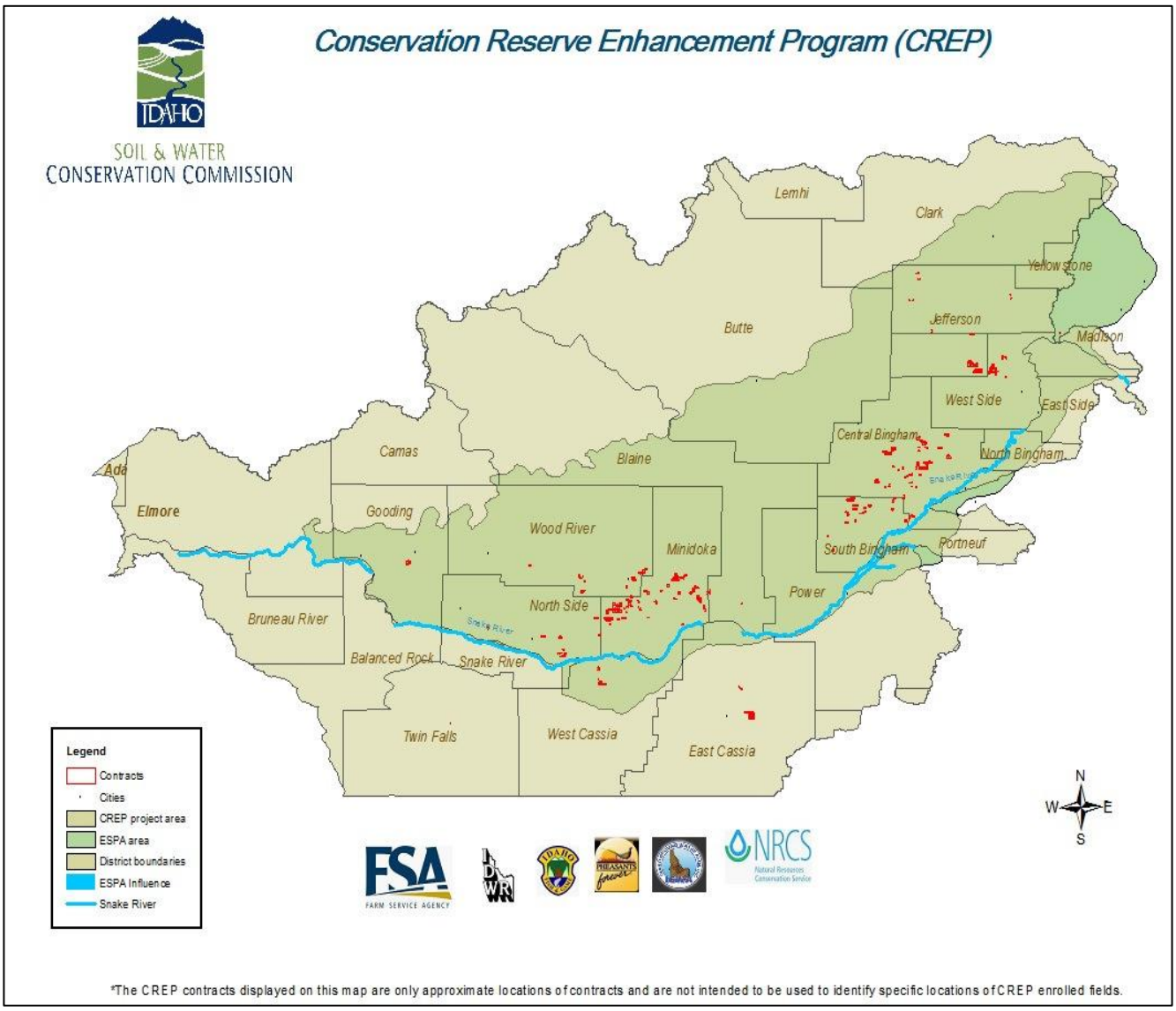
- FY 2017 CREP Annual Report
- Presentation PowerPoint

Idaho's Conservation Reserve Enhancement Program
Eastern Snake Plain Aquifer

FY 2017 CREP Annual Performance Report (CEP-68R)

IDAHO SOIL & WATER
CONSERVATION COMMISSION
established
1939
Conservation the Idaho Way:
Sowing Seeds of Stewardship

Contents



Introduction

Purpose

The purpose of this Annual Performance Report (CEP-68R) is to fulfill the State of Idaho's commitment under the terms and conditions of its agreement dated May 2006 with the United States Department of Agriculture (USDA) and Commodity Credit Corporation (CCC) concerning the implementation of the Idaho Eastern Snake Plain Aquifer Conservation Reserve Enhancement Program. This report covers the Federal FY 2017, defined as October 1, 2016 through September 30, 2017. All tables and charts reflect the status of the program within this range.

Background

The Idaho Conservation Reserve Enhancement Program (CREP) agreement between the State of Idaho, United States Department of Agriculture (USDA) and Commodity Credit Corporation (CCC) was signed in May 2006 for the improvement of groundwater quantity and quality in Idaho. The primary conservation issue addressed in the agreement is the reduction of irrigation groundwater consumptive use. Additional conservation benefits include reductions of potential agricultural chemicals, nutrients and sediments to the waters of the State with concurrent enhancement of wildlife habitat through establishment of vegetative cover.

CREP is a part of the Conservation Reserve Program (CRP) operated by the Farm Service Agency (FSA). Partner state agencies include the Idaho Soil and Water Conservation Commission (ISWCC), the Idaho Department of Water Resources (IDWR), and the Idaho Department of Fish and Game (IDFG). The Idaho State Department of Agriculture (ISDA), and the Department of Environmental Quality (IDEQ), participate in an advisory capacity, serving as part of the CREP Working Group. The federal agency, Natural Resource Conservation Service, (NRCS) provides technical guidelines and information as well as providing important research from the Plant Materials Center in Aberdeen. Non-government entities such as the Idaho Ground Water Appropriators (IGWA) also contribute to this program by providing additional incentives for CREP enrollment to its members.

The main purpose of CREP is to address issues related to water shortages in the Eastern Snake Plain Aquifer (ESPA). Increased use of ground water, drought, and changing irrigation practices have resulted in decreased flows of Springs tributary to the Snake River. The original goal of CREP was to retire up to 100,000 acres of cropland irrigated with groundwater. This reduction of use was intended to provide water savings of up to 200,000 acre-feet annually. After year four of the program, the maximum goal was amended to 50,000 acre enrollment with 100,000 acre-ft. annual reduction.

Pursuant to the terms of this agreement, ISWCC and IDWR are to provide an annual report to FSA summarizing the status of enrollments under CREP and progress on fulfilling other commitments of the program. The following report contains the program updates for FY 2017.

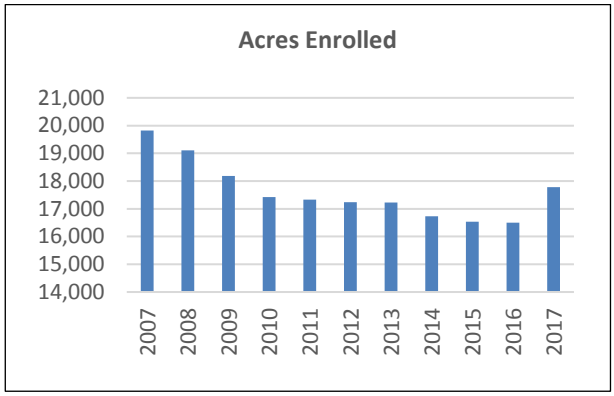
Positive Benefits of the CREP

- The main objective for CREP is to retire irrigated cropland reducing the ground water consumptive use. The intent is to compliment other water saving efforts for the overall strategy to stabilize and replenish the ground water levels in the Eastern Snake Plain Aquifer. (ESPA)
- The program provides an annual rental payment over the contract term for every acre enrolled, helping to remove production risks, to provide protection from complete loss of income, and safe guarding the water right, even when a mandatory curtailment is issued.
- Active CREP acre water savings are easily verifiable and measurable. Other water saving efforts may not always provide as consistent of a reduction of water use that CREP can provide.
- In addition to the annual demand reductions realized from CREP, NRCS (AWEP) programs implementing surface water conversions have provided more than 35,000 ac-ft. of demand reductions on the ESPA. These programs compliment the water savings goals, but actual water savings realized with AWEP-type projects are dependent upon having enough surface water available. CREP is a more consistent water savings option.
- Cover provided by native grass-stands and even non-established stands benefit habitat and nesting for birds and upland game.
- A decision from the Surface Coalition water call settlement includes a 3 year floating average 240,000 ac-ft. reduction in water usage. CREP is valued as one of the water savings options for the landowner to help offset economic hardships to mandatory reductions.
- The curtailment order on expansion water rights specific within the Raft River aquifer area in the fall of 2016 has provided increased participation and provides economic support.
- The flexibility of CREP allows a participant to enroll complete fields, corners, and end gun removals.

CREP Program Status for FY 2017

The number of CREP contracts and enrolled acreage has remained fairly constant since 2014. Most of the remaining contracts are expected to stay active as the cost of liquidated damages for contract terminations increases each year. Efforts to promote the CREP program included both formal and informal outreach to producers and coordination efforts with partner agencies. The Working Group met once in FY17 and had several correspondences thru email and phone communications. The ISWCC CREP staff attend several board meetings of local soil conservation districts and meet with FSA county committees as needed. Fiscal Year 2017 saw an increase in new contracts and an increase in enrolled acres. The program now has the most active contracts in program history and staff anticipate increased participation in the future. The tables and charts below display the overall status of number of signed contracts and active acres for each of the federal fiscal years since the program was initiated.

Fiscal Year (FY)	Number of Contracts	Number of Acres
2007	148	19,818
2008	164	19,110
2009	159	18,189
2010	158	17,422
2011	157	17,333
2012	158	17,237
2013	159	17,227
2014	155	16,729
2015	155	16,533
2016	154	16,504
2017	177	17,781

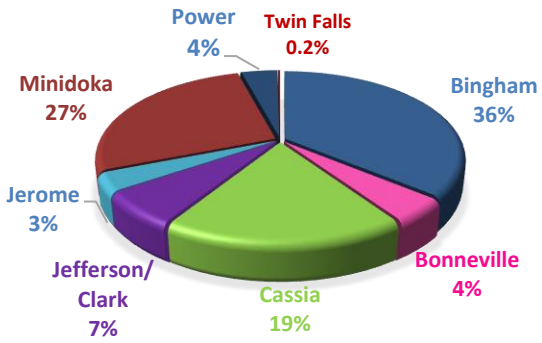


The table and pie charts below represents contracts and acres administered by FSA offices.

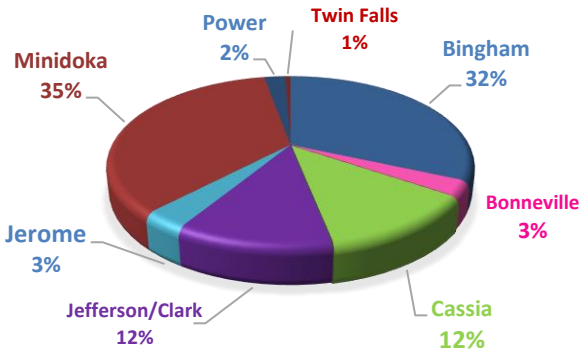
Active Contracts by Administering County Office (as of 9/30/2017)

Administering County	No. of Contracts	No. of Acres
Bingham	56	6,398
Bonneville	5	798
Cassia	22	3,291
Jefferson/Clark	21	1,167
Jerome	6	618
Minidoka	62	4,764
Power	4	703
Twin Falls	1	43
TOTAL	**177**	**17,781**

PERCENTAGE OF ENROLLED ACRES



PERCENTAGE OF ACTIVE CONTRACTS



Increased Participation

The program gained 21 new contracts and increased enrollment by 1,287 acres, concluding FY17 with a net of 177 active contracts on 17,781 acres.

- Most of the new contracts originated in the Raft River area because of required retirement of "expansion" water rights causing immediate water use reductions.
- This last year has had the most offers with end gun removals. The discontinuation of sprinkler "guns" at the end of pivots provides excellent water and energy savings. In addition to the extra savings, water that is being used in the rest of the pivot that isn't in CREP is available by turning on the end gun if a failed stand were to occur.
- Contract splits and transfers to other county offices can change the number of contracts and acreages from one county to another.

Stand Establishment Status

ISWCC field staff physically visit each non-established field at least twice and most of the established fields during the year to develop recommendations for management options. Certifications for established fields began in 2009. Contracts with all fields that have met minimum stand density criteria are listed below: (Approximately 750 additional acres have established stands of grasses, but contain fields within the contract that do not meet the minimum criteria to allow for complete certification. Those contracts and acres are not included in the following table.)

Federal FY	Established Contracts	Established Acres
2009	7	685
2010	28	4,873
2011	13	446
2012	0	0
2013	27	2,481
2014	6	312
2015	5	784
2016	3	23
2017	5	1,964
Total	94*	11,568*

- The total amount reflects a "net amount" after acreage adjustments to contracts that have since been revised or terminated.
- Of the total active contracts, approximately 90% of eligible practices are classified CP2 – Establishment of Permanent Native Grasses and 10% are classified as CP4D – Permanent Wildlife Habitat Non-Easement.
- Other available options for practices can include the following listed below, but without water, they are not as feasible or practical to implement for this specific program:
    - CP22 – Riparian Buffer (Cropland Only)
    - CP25 – Rare and Declining Habitat
    - CP12 – Wildlife Food Plot


Examples of established native stands FY17

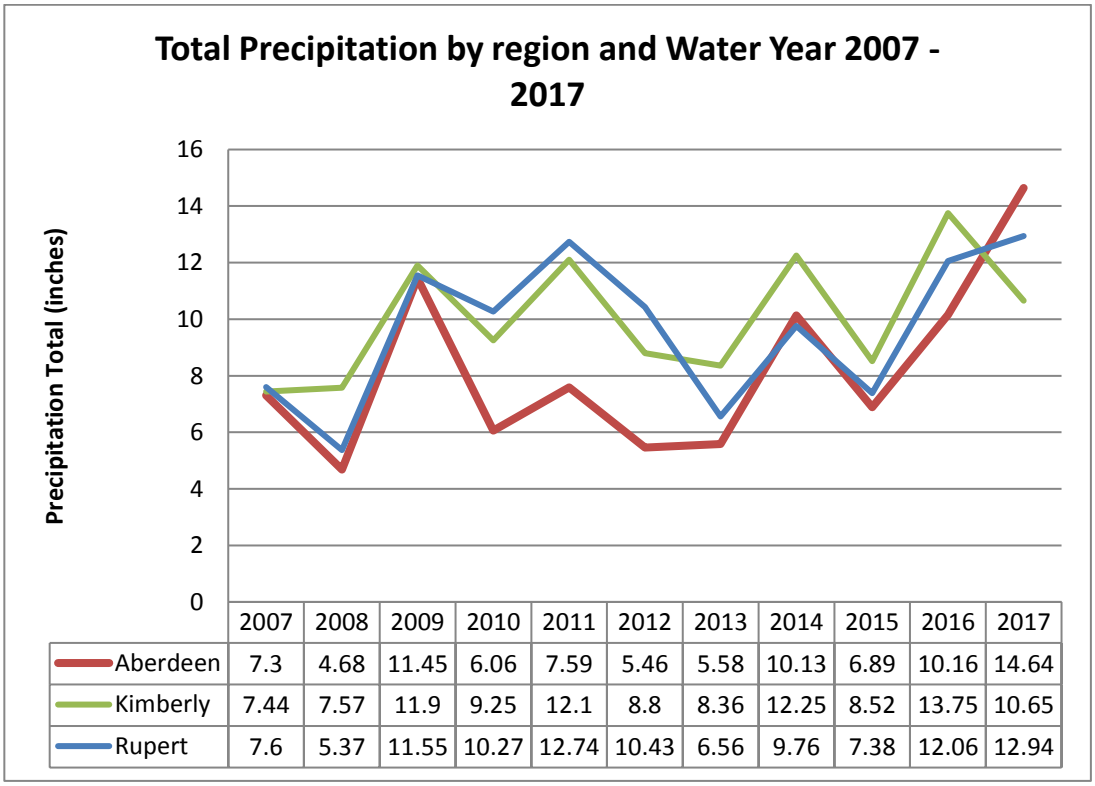
Challenges to Stand Establishment

Producers have always had concern about the costs and risk of seeding high priced native grasses with marginal results. With several back to back years of hot, dry conditions, rodent activity, weed pressures, and sometimes program required mid-management practices, even some of the previously established stands have shown a downward trend. The harsh desert environment can be challenging to maintaining any vegetation. Adding to the challenge over conventional rangeland seeding establishment is the attempt to establish native grass stands in fields that have raised decades of non-native, irrigated crops that also contain decades of non-native weeds under irrigation conditions. Many of the CREP fields are also located in very dry locations adding to the challenge of stand establishment. These locations previously were productive only because of the irrigation and the soil ecology takes time to adjust back to its non-watered status.

When the program began, the first seeding attempts had a limitation of no more than 1/3-acre ft. of water. Combined with a burn ban of crop residue at that time, farmers had limited options for preparing their seedbed and initial weed control. The hot, dry, windy conditions quickly erased the value of the applied water on the new plantings. Farmers who overwatered, or watered and were able to pack the ground had the higher success rate for initial establishment. Once established, staff do not conduct annual field inspections. This sometimes results in stands that are subject to infestations from grasshoppers, rodents, or weeds that can go unnoticed by staff and even the participant. The plants struggle to maintain their densities and vitality.

The precipitation charts below indicate the nature of the dry years and precipitation events since CREP began. Most of the CREP contracts are located in areas best represented by the Aberdeen graph (red). As indicated from the graphs, the very dry conditions experienced from 2012 to 2013 which saw less than 6" annual rainfall (Aberdeen station), almost doubled in 2014 with a return to a more normal average of 7" of rainfall received in 2015. Only since 2015 have the precipitation amounts returned to somewhat of a more normal cycle.

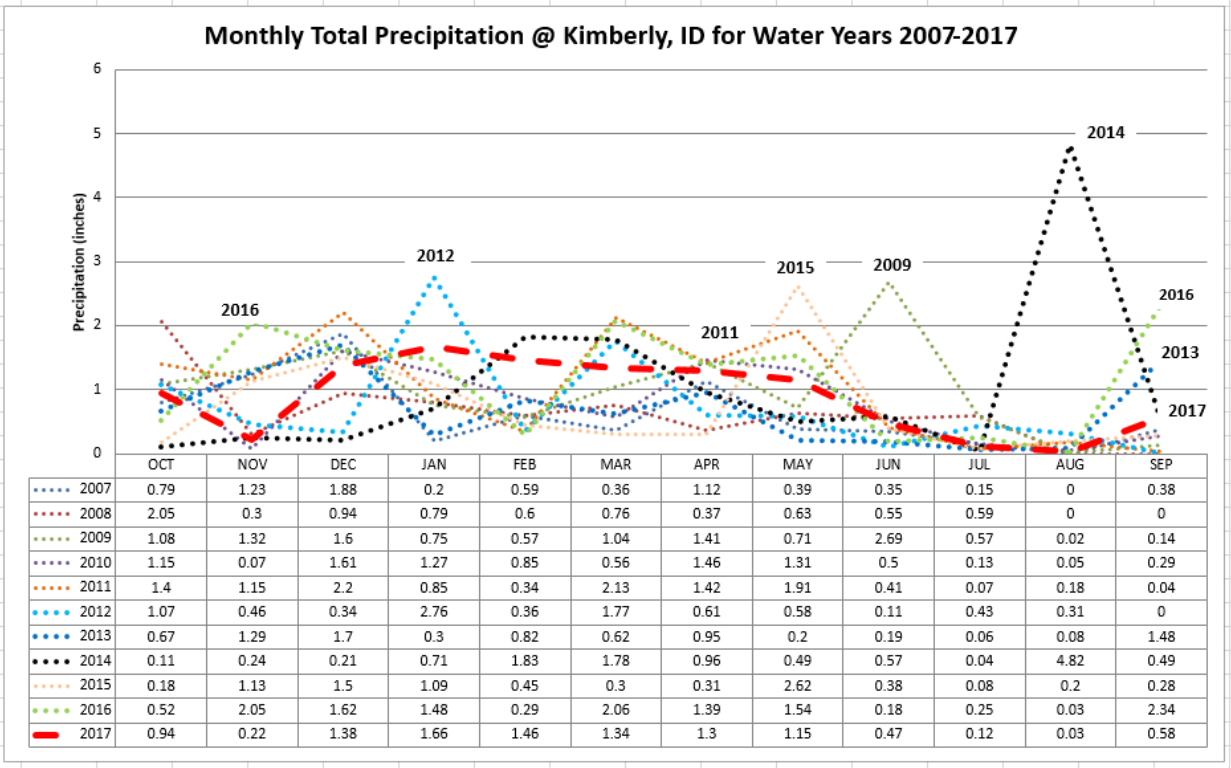
(Aberdeen: 8.2"; Kimberly: 10.0"; Rupert: 9.7")



	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Aberdeen	7.3	4.68	11.45	6.06	7.59	5.46	5.58	10.13	6.89	10.16	14.64
Kimberly	7.44	7.57	11.9	9.25	12.1	8.8	8.36	12.25	8.52	13.75	10.65
Rupert	7.6	5.37	11.55	10.27	12.74	10.43	6.56	9.76	7.38	12.06	12.94

Average annual precipitation for the last 10 years: (from Agrimet Weather data)

The graph below represents the timing of the precipitation (from Agrimet Weather data)



	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
2007	0.79	1.23	1.88	0.2	0.59	0.36	1.12	0.39	0.35	0.15	0	0.38
2008	2.05	0.3	0.94	0.79	0.6	0.76	0.37	0.63	0.55	0.59	0	0
2009	1.08	1.32	1.6	0.75	0.57	1.04	1.41	0.71	2.69	0.57	0.02	0.14
2010	1.15	0.07	1.61	1.27	0.85	0.56	1.46	1.31	0.5	0.13	0.05	0.29
2011	1.4	1.15	2.2	0.85	0.34	2.13	1.42	1.91	0.41	0.07	0.18	0.04
2012	1.07	0.46	0.34	2.76	0.36	1.77	0.61	0.58	0.11	0.43	0.31	0
2013	0.67	1.29	1.7	0.3	0.82	0.62	0.95	0.2	0.19	0.06	0.08	1.48
2014	0.11	0.24	0.21	0.71	1.83	1.78	0.96	0.49	0.57	0.04	4.82	0.49
2015	0.18	1.13	1.5	1.09	0.45	0.3	0.31	2.62	0.38	0.08	0.2	0.28
2016	0.52	2.05	1.62	1.48	0.29	2.06	1.39	1.54	0.18	0.25	0.03	2.34
2017	0.94	0.22	1.38	1.66	1.46	1.34	1.3	1.15	0.47	0.12	0.03	0.58

Although the higher precipitation is welcomed, the timing and amount of precipitation has not always been optimal for the health and maintenance of grass stands, and has provided opportunities for increased weed and pest encroachment. The red hashed line represents this past year's rainfall which shows a near average including the end of June when precipitation stayed at or near 0 through to September.

For many of the reseed situations, ground preparation, weed control, availability of moisture, and timing of rainfall in early spring remain to be the critical components for successful establishment. Moisture may be available in February, but the ground temperature is usually too cold as the vegetation remains dormant. During many spring months, when the soil temperature has warmed enough for germination, wind and evaporation deplete the surface moisture, leaving a new seedling in a vulnerable situation unless adequate rainfall arrives in a timely manner. Meanwhile, deeper rooted weeds with access to moisture and annual grasses which germinate early in cooler soil temperatures can present early pressures to the native stands. Early applied chemical applications can suppress many of the broadleaf weeds, but if done too soon in the spring will risk plant injury from late frosts. Multiple spring herbicide applications have been used effectively killing the weeds before robbing the precious moisture needed by the young seedlings. Multiple chemical applications throughout the year can be an effective method not only to reduce water consumption from the weeds, but also to reduce the production of duff and debris that harbor the pests.

Late summer rains brings broadleaf weeds and Cheatgrass in the late summer months. Cheatgrass can aggressively and quickly blanket the ground, competing for water and resources with desired species. It only takes a couple of years to completely lose a good stand of desired plants. Cheatgrass (Downey Brome), although not a desired plant, does provide some protection and stability from wind erosion.

Pest Control Options, Weeds

Herbicide treatment options such as the product Plateau are valuable tools that have proven to be very effective for control of Cheatgrass and other annual grasses and provide suppression of many of the common broadleaf weeds such as mustard, kochia, and Russian thistle. Legumes such as alfalfa, forbs such as blue flax, and brush such as rabbit and sage are tolerant to the product, which makes this a well-rounded option for weed suppression to promote native grass stands. The label shows a "minimum plant back interval" of 1 year for wheat, 2 ½ years for corn, and up to 4 years for high valued rotational crops like sugar beets and potatoes. For contracts that have 5 years remaining, producers who plan to return to farming the land are opting to not use the product.

For completely failed stands, non-selective herbicides such as Roundup (Glyphosate), has been used to completely kill and clean the plant growth before re-seeding. Some producers choose to apply and kill the weed stand early in the year, before weed seed formation, and then burn off the residue while the surrounding desert plants are still green which minimizes any chance of a wildfire. This has proven to be one of the more effective techniques for re-seeding options.

Pest Control Options, Rodents, Insects

Vole and mice activity was significant during the 2014 and 2015 growing seasons. Rodent activity seemed to subside in 2016, only to return in 2017. The natural cycle of succession and increased populations of resident predators such as coyotes, owls, and hawks help to control rodents. Large numbers of adult owls continue to be observed throughout the CREP fields. Although predator populations are increasing, the value of residue removal to aid in rodent control is becoming better understood. Increased cover and "duff" provide hiding and limited access for the natural predators. The succulent moisture within actively growing plants is a strong attraction to the rodents during dry periods and this stresses the plant to the point of irreversible damage. Removal of the duff or cover is proving to be the best way of limiting the damage to rodents. Burning, clipping, residue removal, and spraying weeds to minimize residue growth, moisture depletion, and seed formation are effective for limiting loss of the desired grasses.

Once fields are certified, ISWCC staff do not perform annual inspections until scheduled mid-management is needed. Many producers are busy with normal farming operations, and many are absentee owners with many fields that are not actively monitored. A trend has been noted in some areas where previous existing stands suffered and even disappeared because of the high volume rodent activity. Residue removal in addition years to the required mid management year can help to reduce the negative impacts from pests.

After a burn or chemical treatment, no-till and range drills are being used for re-plantings providing good seed placement and seed to soil contact at consistent, proper depths. This minimal disturbance saves whatever moisture is available as compared to conventional tillage type practices.

Plant mixes including introduced species with native species has shown some positive results for establishment on previously thin or failed stands. The combination of native grasses with Crested or Siberian grass is better able to compete with weeds and is less expensive as compared to only native plantings.

Additional Techniques

The implementation of cover crops such as radishes, and other leafy plants like canola or other varieties of the Brassicaceae family of plants shows some promise against the fight for weeds. As the leafy growth subsides in the late fall, the wet leaves "melt" onto the surface of the soil and thru the winter can provide a natural barrier, helping to reduce new infestations of weeds.

Using the addition of a soil bacteria amendment to help control Cheatgrass had been showing more promise. These bacteria inhibit the growth of roots of the Cheatgrass and seem to be specific to this weed; however, companies have been struggling with labeling and other costs which have reduced the availability of the product. This management strategy appears to be a few years away from availability.

Conventional tillage to clean up a field and bury weed seeds is an option however, without the availability of additional watering, it is impossible to get the ground firm enough for a decent seedbed. The loose soil can leave the field vulnerable to wind erosion.

Allowing intensive grazing of unestablished stands to reduce weed growth and promote better seedbed preparation is being considered by the agencies and producers as an acceptable practice. This is probably the best or second best method to burning of residue. CRP rules, however, have been clear that grazing cannot occur on stands that have yet to be established. If a pilot project could be initiated, the value of high intensity, short duration grazing could prove to be a feasible option for ground preparations and stand establishment.

Surprisingly, original stands of alfalfa are still present in many areas even after ten years without irrigation. The deeper, well established roots have been able to take advantage of the moisture that has migrated thru the soil profile during the winter months. Full stands of alfalfa have been able to restrain any weed encroachment and at the same time provide positive results as pollinators. Alfalfa also has the ability to "mine" available nitrogen, if present, out of the deeper soil profile, when available, which improves ground water quality.

The vegetative ecosystem is slowly returning towards the historic environmental conditions as a desert community. Some adjacent areas that have shrub communities such as sage and rabbit brush have been naturally migrating into the fields from seed sources in the neighboring rangelands.

Mid-Management Practices

For lighter, less dense stands, harrowing can be an option to stimulate the grasses.

Mechanical operations such as low clipping, harrowing, or burning are some examples for non-tillage options for mid-management and seedbed preparations.

"Knee-high" clipping has been recommended on certain stands to minimize plant stress and provide plant diversity. Plant species type is considered when working with individuals in the field for mid management options. Heavier, dense stands are usually clipped with residue removal so as not to "smother" the grasses.

The use of a heavy rubber tire roller may prove to be a cost effective alternative for breaking the mustard and other weed stems in lighter density stands, especially when dry, while at the same time helping to repack the soil to aid in moisture retention. One producer traveled across a field with a roller to evaluate the effectiveness of the practice. Weed carcasses crumpled, while the grasses remained intact. The compaction from the heavy roller seemed to help hold moisture to the surface longer. This less invasive method may prove to be an inexpensive option to help reduce the blowing mustards and Russian thistle and to help allow established vegetation to succeed.

Management practices such as grazing or burning improves the chances of stand survival by removing old growth weeds and grass residue. Excess debris aids as a safe haven for the rodents. Voles and mice flourish while natural predators have a difficult time getting to their prey. Grazing usually is not authorized on CREP fields except in drought conditions and rental reductions along with the late timing of allowed grazing nullify any benefits to the producer to take advantage of that practice.

Burning of residue proves to be the most beneficial option, but many producers are hesitant because of proximity to adjacent desert land. Burning or removal of the "duff" helps the stand survival by removing the cover allowing natural predators to aid in their role of limiting the propagation of the undesirable pests. One CREP participant reported that had he not burned off his cover, his stand would have failed to the vole infestations.

Mid-Management, rotational 1/3 clipping

Mid-Management, Controlled Burn

Participation Challenges

The original goal for CREP was to enroll up to 100,000 acres of groundwater-sourced irrigated cropland into the program, saving a projected 200,000 acre-ft. (AF) of water annually. A few years later, the available program acreage was modified to 50,000 to accommodate the actual response to the program. Some of the challenges to reaching the goaled participation include:

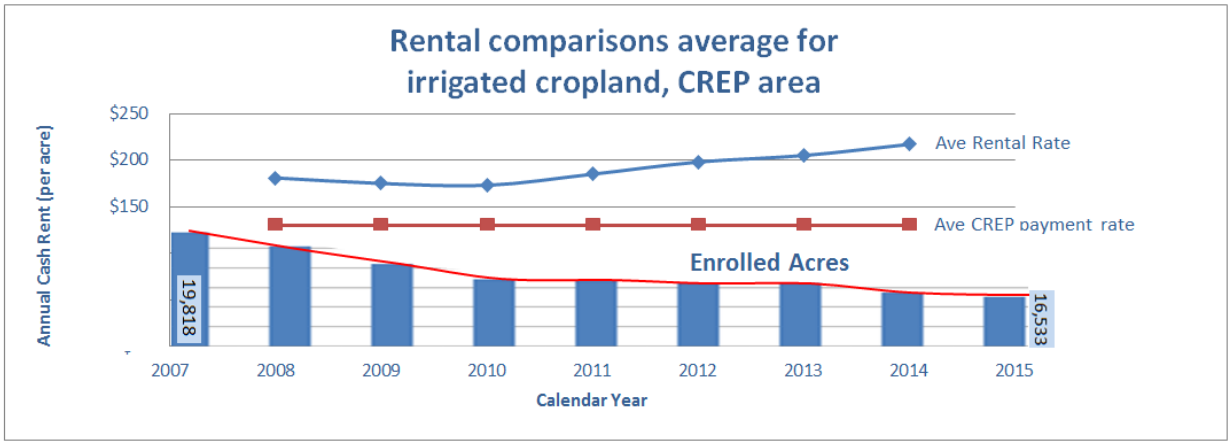
- Annual payment rates since the program began had not kept pace with current cropland rental rates. Because of this, many producers have been reluctant to enroll additional land especially when commodity prices have significantly increased in the last ten years.
- Some producers have been hesitant about making a 15-year commitment with a fixed annual rent that doesn't provide income adjustments with inflation.
- The high cost of native grass seed and only limited success from several years of drought have discouraged many from continuing to try to get stands established like they would want. In addition, weeds such as mustards, kochia, Russian thistle and Cheatgrass continue to impede success. Even some previously established stands have failed from the more aggressive nature of the non-native weeds.
- In several cases, program payment limitations for producers kept them from participating fully in the program.
- Lack of threat of mandatory curtailment.
- Three of the counties within the program area originally did not qualify FY because of acreage limitations.
- Non-highly erodible land (NHEL) was not eligible for CREP at the beginning of the program.

Seeking solutions to Acquiring New Enrollment

In the spring of 2016, the CREP Working Group met to discuss some of these issues and discuss options of making the program more attractive to the producers.

The data in the graph below was used to visualize how the number of enrolled acres in the program dropped considerably, coinciding with the time period when average rental rates increased.

The proposal was sent to the state FSA office in July 2016. After many reviews, the proposal was sent to the FSA in Washington D.C. for consideration.



Rental Rate Increase Approved

In September, 2017, FSA approved the increased rental rates request with the exception of Jefferson, Bonneville, Blaine counties and became effective for all new offers after October 1, 2017 (the beginning of FY 18). Rental rates in the approved counties were increased by $30 per acre. IGWA met in October and verified that ground located within the participating groundwater districts will offer additional annual incentives in the form of either payments or credits against their assessments after the producers "initial" 12.5% reduction has been met. The enhancement increases by IGWA will be on a case by case basis.

The increase in rental rates and IGWA's additional annual enhancement is expected to spur additional participation in the program. This will further improve CREP's role as an important option for producers by providing an equitable, measurable water savings over a longer period of time. ISWCC and IDEQ will monitor closely of workload demands to ensure that program delivery is provided in a timely manner.

Outreach

The CREP Working Group met in person and on the phone/online to keep all apprised of the ongoing efforts. The FSA office in Washington D.C. had additional questions that needed to be addressed including verification of rental rates with actual current lease agreements. IGWA collected actual leases and submitted to FSA for documentation of actual and current rent and consideration.

ISWCC staff attends district and some FSA committee meetings in person and by video conferencing through the year and CREP informational pamphlets have been distributed at grower meetings as well.

Additional Water Saving Efforts in the ESPA

Regional Conservation Partnership Program (RCPP), IWRB

An RCPP application from Idaho Water Resource Board (IWRB) has been approved and funded with implementation to begin in 2018. The grant is for $5.3 million from NRCS, with an additional $6.5 million from the state of Idaho. Planned practices with this program include: 1) End Gun Removal; 2) Conversion from groundwater to surface water supplies; 3) Flood Irrigation management practice retention; 4) conversion from irrigation to dryland cropland.

Regional Conservation Partnership Program (RCPP), IGWA

Another RCPP application, this one from Idaho Groundwater Appropriators, (IGWA) for $5.5 million, deals primarily with assistance for installation of flow meters on wells. At this time, it has yet to be announced whether this program will be funded.

Managed Recharge efforts (IDWRB & IDWR)

The IDWR has been working on effective recharge efforts within the ESPA. The agreement from the Surface Water Coalition water call is to reduce groundwater consumptive use by 240,000 acre-ft. and install and increase recharge capacity to provide another 250,000 acre-ft. recharge.

Previous Efforts in the ESPA

Comprehensive Aquifer Management Plan (CAMP)

The Eastern Snake Plain Aquifer (ESPA) Comprehensive Aquifer Management Plan (CAMP) or ESPA CAMP establishes a long-term program for managing water supply and demand in the ESPA through a phased approach to implementation, together with an adaptive management process to allow for adjustments or changes in management techniques as implementation proceeds. It is projected that a hydrologic goal of a net ESPA water budget change of 6,000 AF annually can be achieved by the year 2030 through implementation of a mix of management actions including, but not limited to,

- aquifer recharge
- ground-to-surface water conversions
- Demand reduction strategies.

The Plan sets forth actions which stabilize and improve spring flows, aquifer levels, and river flows across the Eastern Snake Plain.

Agricultural Water Enhancement Program (AWEP)

- NRCS funded programs such as the Agricultural Water Enhancement Program (AWEP) and Environmental Quality Incentives Program (EQIP) provided funding for producers to install surface water soft conversions which have provided more than 35,000 AF of additional demand reductions on the ESPA.
- Although these programs compliment the water savings goals, actual savings realized with these projects can vary depending upon having enough surface water available. CREP provides an option that demonstrates water savings that is consistent and measurable throughout the contract period.

Idaho Ground Water Appropriators, Inc. (IGWA)

The Idaho Ground Water Appropriators) purchased three large fish facilities in the Hagerman Valley in 2010. In purchasing these three large aquaculture facilities, it fulfilled the requirement of more than 160,000-200,000 AF of Demand Reduction for the Southern part of the ESPA CAMP.

Recommendations for Program Improvement

Increasing Field Efficiency Implementing CREP

ISWCC staff continues to use merged GIS shape file “road maps” for planning field visits efficiently and selecting areas needing follow up. Staff use Galaxy Android smart pads and phones that utilize Global Positioning Systems (GPS) to tag photos, pinpoint problem areas, and expedite compliance checks. The use of these devices and the Avenza PDF mapping program has allowed staff to do more field checks and expedite field work documentation. The technology provides the ability to locate individual fields faster, and provide improved field information & documentation for the producer and FSA. Staff are also able to perform more accurate estimation and tagging areas needed for weed control and seeding and pinning problem areas for the participant.

GIS products and technology

Additional GIS field tools have been analyzed for improved utilization of existing programs. The Environmental Systems Research Institute (ESRI) online products such as Collector and Survey 123 are available but have not been authorized to be used by FSA. The apps can provide the ability to share status, and field information on which contracts have been checked, and report growers' needs in real time with each of the staff. Unfortunately, this technology has been put on hold until FSA determines the security provisions of cloud technology and preserving sensitive information. Although it is believed that ESRI systems are very secure, it is understood that no policy has been developed for properly using the application and preserving sensitive data. The state Department of Administration Information Technology (I.T.) and IDWR have been exploring ways of secondary authentication of data on the state's hard drive and utilizing external base maps. Another session with the agencies is needed to see if FSA has updated any of the policies for utilizing GIS online. ISWCC staff also have level II federal e-authentication clearance to access files from USDA and have the ability to enter and report progress into the Customer Service toolkit program.

Continuing to seek solutions to securely share information between agencies

IDWR provides staff to evaluate new offers and to prepare revisions for water verification and savings. This past year, the ISWCC moved its State office to IDWR's building. The physical proximity of the offices has greatly improved the communication and expedited the process between the two agencies in implementation of the program.

The Idaho Department of Administration had been exploring ways of "hosting" the files on their server and limiting access to only those primarily responsible for the program. Once we accomplish this, the state agencies can provide a much needed improvement to database management and communication.

Individual Privacy Provision

CREP partners respect privacy concerns and ensure that Federal "1619" policies are followed. When locations are analyzed for computing water savings, modeling, and estimated travel times, field boundary displays for meetings are "fogged" to dissipate actual boundaries are removed, and individual information is scrubbed to ensure private information stays secure.

As previously mentioned, ISWCC staff have been working with GIS staff at the Idaho Department of Administration, and FSA to find solutions to utilize the technology such as ARCGIS online and collector tools that are available. When the solutions are found, increased field data collection efficiencies will provide more real time reporting.

Measuring Soil Quality

Testing for soil quality before and after program enrollment was not considered at the beginning of the program. This information can be useful for measuring the effects of the CREP program on soil quality as the field changes from conventional tilled, irrigated cropland to permanent vegetative dryland cover/wildlife land. It was recommended at the beginning of the program as part of its Best Management Practices (BMP) effectiveness that ISWCC create a work plan and collect soil quality data on some sites at the beginning of the contract period, periodically thru the contract period, and upon conclusion of the contract. Soil quality trends gathered can show changes in soil quality and health including the effects on organic matter, compaction layers, water holding capacity, and pH levels. This feedback process, which could provide some valuable information for soil health, has not been initiated due to limited staffing and funding.

Annual Monitoring status

The CREP partners collect and analyze data annually to assess water and power savings, determine soil savings and average reduction of chemicals, and monitor wildlife habitat. Field checks are performed to assess grass establishment and modify FY efforts in weed management based on existing conditions. The total amount of acreage enrolled in CREP can be compared to retiring water usage from 127 pivots covering 140 acres each or retiring the equivalent to almost 28 sections of land (640 acres = one section).

Water Savings

IDWR monitors and documents actual water savings. Each acre enrolled into CREP equals four decreed diverted AF or actual water savings of approximately two AF. With 17,781 acres currently enrolled, *decreed* water rights are reduced by approximately 71,128 AF: or an estimated actual savings of 35,564 AF. The CREP is now currently at 18% of the original goal to save 200,000 AF annually or 36% of the refined target of 100,000 AF. The equivalent water savings is close to the annual consumptive use of approximately 340,000 people. The extent of these water saving benefits are shown using the IDWR ground water model. The ESPA ground water model has been measuring Snake River flows and detecting moderate increases in spring levels from the Thousand Springs area and larger increases from the American Falls area. Model trends indicate continued increases for future years.

Soil Erosion

Due to the highly erodible nature of the farm ground enrolled in the CREP program, changing the ground cover from annual cropping systems to permanent vegetative cover provides average soil savings of two tons per acre per year from water erosion and six tons per acre per year from wind erosion. This equals soil savings of 35,564 tons per year from water erosion and 106,692 tons per year from wind erosion.

Pesticides and Nutrients

Often attached to eroded soil particles are nutrients such as nitrate (NO3) and phosphate (PO4), pesticides, or other agricultural chemicals applied to the field. By reducing the amount of soil erosion, the potential amount of nutrients and pesticides reaching groundwater or downstream water bodies is greatly reduced. Considering variables such as amount of fertilizer applied to a field, the type of fertilizer used, and crop rotation, it is estimated that 1.7 to 4.5 million pounds of fertilizer are no longer being applied to enrolled acres.

Wildlife Populations and Habitat

Of special concern within the CREP area is habitat of grassland-nesting birds including sharp-tailed grouse and sage grouse. Sage grouse are of particular concern throughout the entire state due to a steady decline in population since monitoring began in the 1950's. More extensive declines have occurred in the Upper Snake region, which encompasses much of the Idaho CREP area[1]. Acres enrolled in CREP can provide nesting and cover opportunities especially if the fields are adjacent to growing sagebrush. While some contracts specifically had sagebrush planted initially, many fields have sage brush establishing naturally from nearby seed sources. As noted from Fish and Game, this can provide some brood benefits for the sage grouse.

Fish Habitat

The benefits of the CREP program peak during the irrigation season when the demand for irrigation water is the greatest. Voluntary reduction programs reduce the demand during this peak, allowing more water to stay in the aquifer. Aquatic habitat will continue to improve through the reduction of potential sediment, pesticides, and harmful nutrients entering the waterways. Improved water quality and increased stream flows can provide a higher quality habitat for various native aquatic species as well as sensitive species found throughout the Thousand Springs reach of the Snake River.

[1] Conservation Plan for the Greater Sage-grouse in Idaho, Idaho Department of Fish and Game, 2006

Coordinate additional CREP efforts targeting sage grouse

It is recommended that Idaho CREP partners continue to identify measurable objectives aimed at protecting sage grouse by increasing existing efforts and proposing new measures. The permanent vegetation provides continual cover, and nesting opportunities that didn't exist when the land was farmed. As mentioned above, there are many areas that are naturally establishing with sage brush. Staff makes recommendations to the producers to not clip and only spot spray in those areas where the sage brush is establishing.

State and In-Kind Contributions

Summary of Non-Federal Program Expenditures

PROGRAM TOTALS – FY 2007 THROUGH FY 2017
TOTAL STATE CASH AND IN-KIND CONTRIBUTIONS

FY 2007	$5,230,360
FY 2008	$35,390,421
FY 2009	$3,814,925
FY 2010	$4,436,640
FY 2011	$5,271,232
FY 2012	$1,528,156
FY 2013	$3,263,418
FY 2014	$1,926,576
FY 2015	$9,489,531
FY 2016	$9,714,041
FY 2017	$12,962,855
PROGRAM TOTAL TO DATE:	$93,028,155

FY 2017 TOTAL STATE CASH AND IN-KIND CONTRIBUTIONS		
Idaho Department of Water Resources	$12,360,171	
Idaho Soil and Water Conservation Commission	$602,032	
Idaho Ground Water Appropriators	(included in IDWR)	
Idaho Department of Fish and Game	$652	
TOTAL		**$12,962,855**

FY 2017 DETAILED SUMMARY BY AGENCY:		
Idaho Department of Water Resources		
Water Master Expenses by District		
WD 01 Upper Snake River	$1,795,450	
WD 100 St. Anthony-Rexburg	$8,144	
WD 110 Mud Lake	$88,890	
WD 120 American Falls	$130,970	
WD 130 Thousand Springs	$48,229	
WD 140 Oakley Valley	$71,807	
WD 143 Raft River	$9,000	
TOTAL Water District Expense		**$2,152,490**
Idaho Ground Water Appropriators (Included in IDWR report above)		
IDWR Projects Recharge projects, loans, studies, cloud seeding projects within the ESPA	$10,202,461	
Total IDWR Projects		**$10,202,461**
IDWR Employees Paula Dillion, Linda Davis Rick Collingwood, Sandra Thiel		**$5,220**

Idaho Soil and Water Conservation Commission		
ISWCC Employees		
Chuck Pentzer, State CREP Coordinator		
Brian Reed, Idaho Falls		
Rob Sharpnack, Shoshone		
Carolyn Firth, Burley		
Technical Records Specialist, administrator, Boise support		
Total ISWCC Employee Wages		**$135,190**
ISWCC Operating Expense		
Contract assistance		
Fuel, travel, office expenses		
Equipment	$25,949	
Total ISWCC operating expense	$54,514	**$80,463**
Annual Loans		
Resource Conservation and Rangeland Development Program (Loan)		
TOTAL ISWCC program loans (ESPA only)	$386,379	**$386,379**

Idaho Department of Fish and Game (IDFG)		
IDFG Employees		
Sal Palazzolo (meetings, updating staff)	$652	
Total IDFG		**$652**

Pursuant to the terms of the contract, it should be noted that the State of Idaho has met its obligation to use $5 million to purchase permanent private water rights in the ESPA CREP area no later than December 31, 2010. During 2007, the State of Idaho partnered with the City of Twin Falls and the North Snake and Magic Valley ground water districts to purchase the Pristine Springs area for a total of $26 million. The purchase of this area addressed a number of conflicts between spring water users and ground water users in the Magic Valley and provided the City of Twin Falls with a fresh water source to improve the quality of its water supply. This expenditure was reported as a line item by IDWR in the FY 2008 Annual Report

established 1939

Idaho's Conservation Reserve Enhancement Program
Eastern Snake Plain Aquifer

ISWCC CREP REPORT
April 12, 2018

Idaho Soil & Water Conservation Commission

FY 2017 CREP Annual Performance Report (CEP-68R)

Conservation the Idaho Way: Sowing the Seeds of Stewardship

IDAHO SOIL & WATER CONSERVATION COMMISSION

established 1939

Idaho CREP

- *Voluntary* reduction of groundwater consumptive use
- *Original* plan was to reduce the application up to 200,000 acre-feet annually from groundwater cropland usage.
- Increase groundwater levels in the ESPA and increase spring water discharge to the Snake River
- Provide native grassland habitat during the contract period
- CREP follows CRP rules and incorporates involvement with Idaho Department of Water Resources (IDWR).

Multi-Agency Involvement

(FSA) Administers the program:
- Cropland, determines producer eligibility,
- Annual rental payments made by Commodity Credit Corp.

(IDWR) Ensures water right information is valid:
- Verifies the water right is associated with the offer
- Calculates and reports water savings

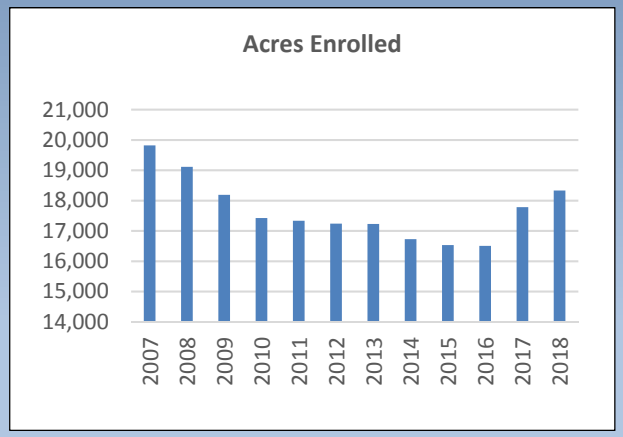
(ISWCC) Provides technical assistance:
- Develops conservation, grass seed plan (NRCS specs)
- Ensures data transfer in timely manner
- Primary holder to the Agreement not to divert (ANTD)
- Primary CREP Staff
  - Chuck Pentzer, State CREP Coordinator
    - Rob Sharpnack, Shoshone
    - Brian Reed, Idaho Falls
    - Carolyn Firth, Burley

April 12, 2018

ISWCC CREP REPORT

established 1939

Fiscal Year (FY)	Number of Contracts	Number of Acres
2007	148	19,818
2008	164	19,110
2009	159	18,189
2010	158	17,422
2011	157	17,333
2012	158	17,237
2013	159	17,227
2014	155	16,729
2015	155	16,533
2016	154	16,504
2017	177	17,781
To Date:	**180**	**18,332**



April 12, 2018
ISWCC CREP REPORT

established 1939

Administering County	No. of Contracts	No. of Acres
Bingham	56	6,398
Bonneville	5	798
Cassia	22	3,291
Jefferson/Clark	21	1,167
Jerome	6	618
Minidoka	62	4,764
Power	4	703
Twin Falls	1	43
TOTAL	177	17,781

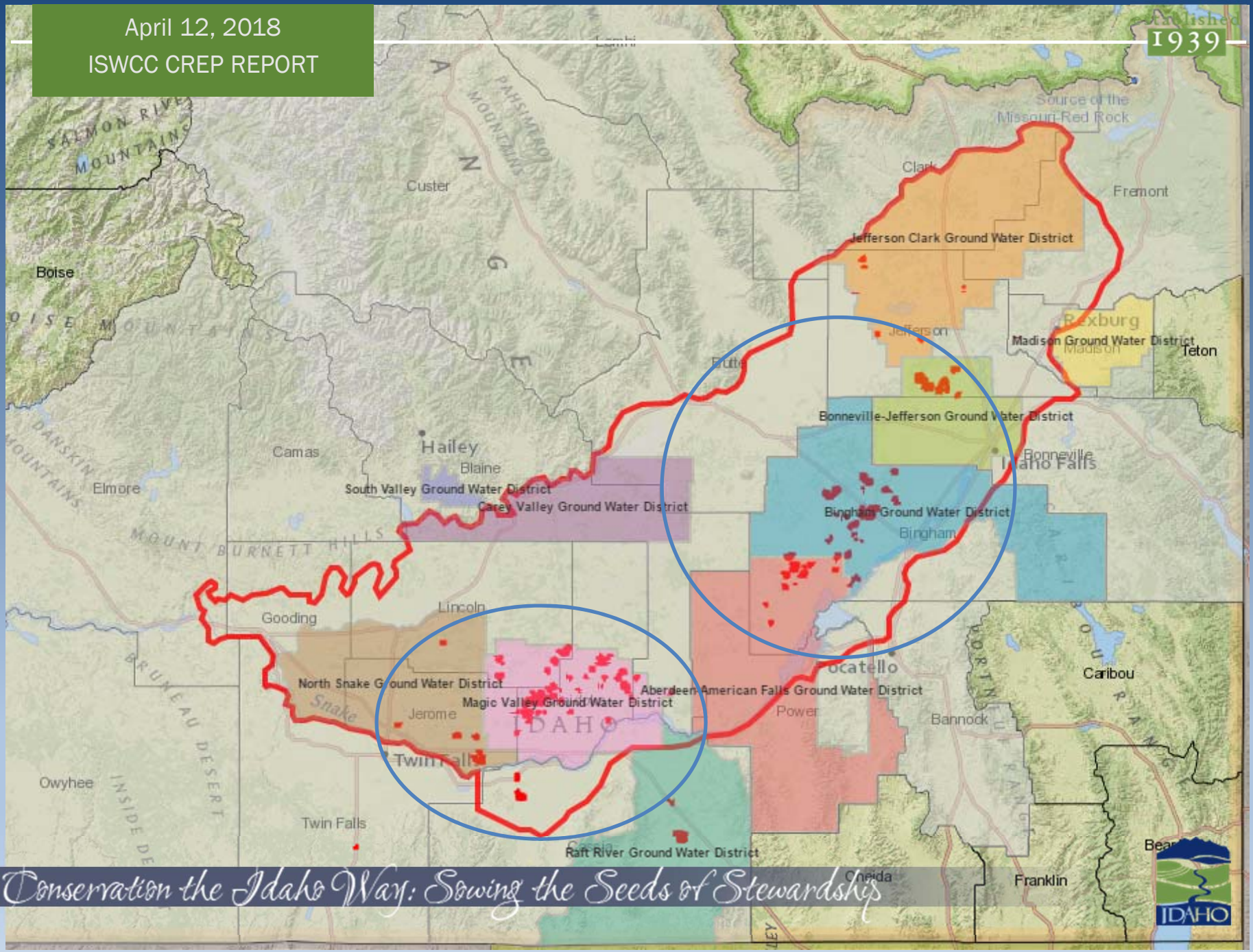
To Date:	**180**	**18,332**

April 12, 2018
ISWCC CREP REPORT

established 1939

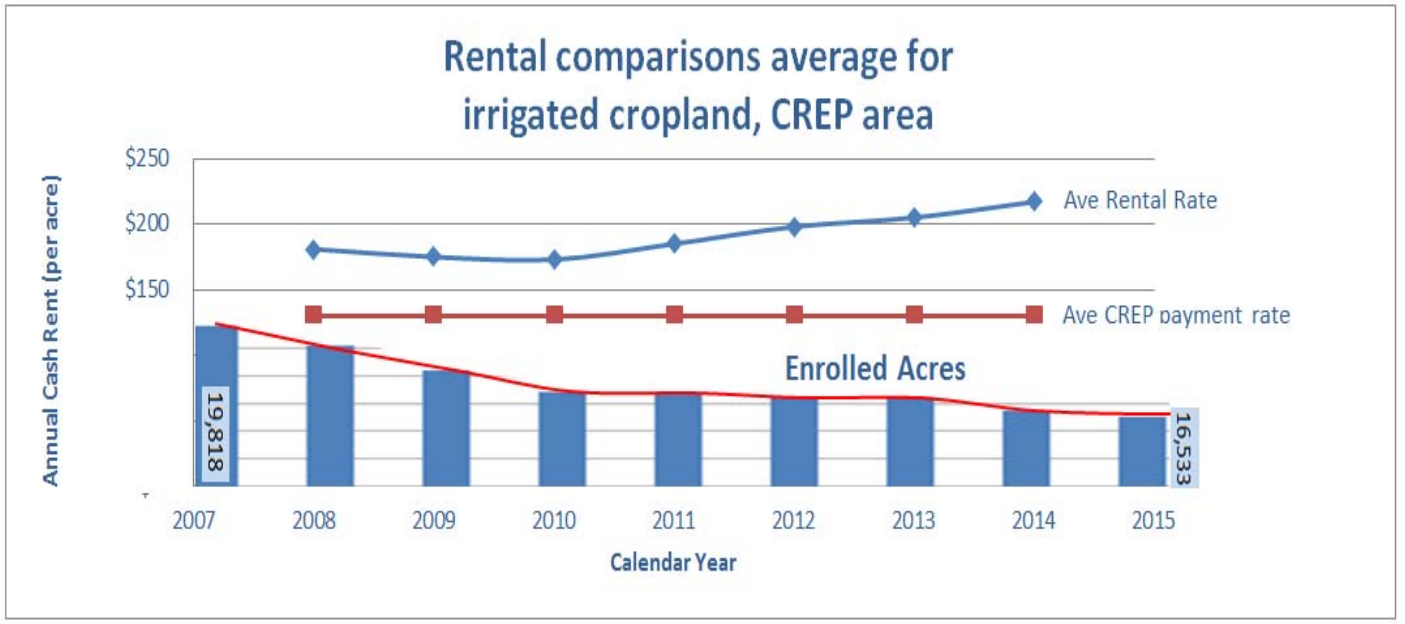
Federal FY	Established Contracts	Established Acres
2009	7	685
2010	28	4,873
2011	13	446
2012	0	0
2013	27	2,481
2014	6	312
2015	5	784
2016	3	23
2017	5	1,964
Total	94*	11,568*

April 12, 2018
ISWCC CREP REPORT

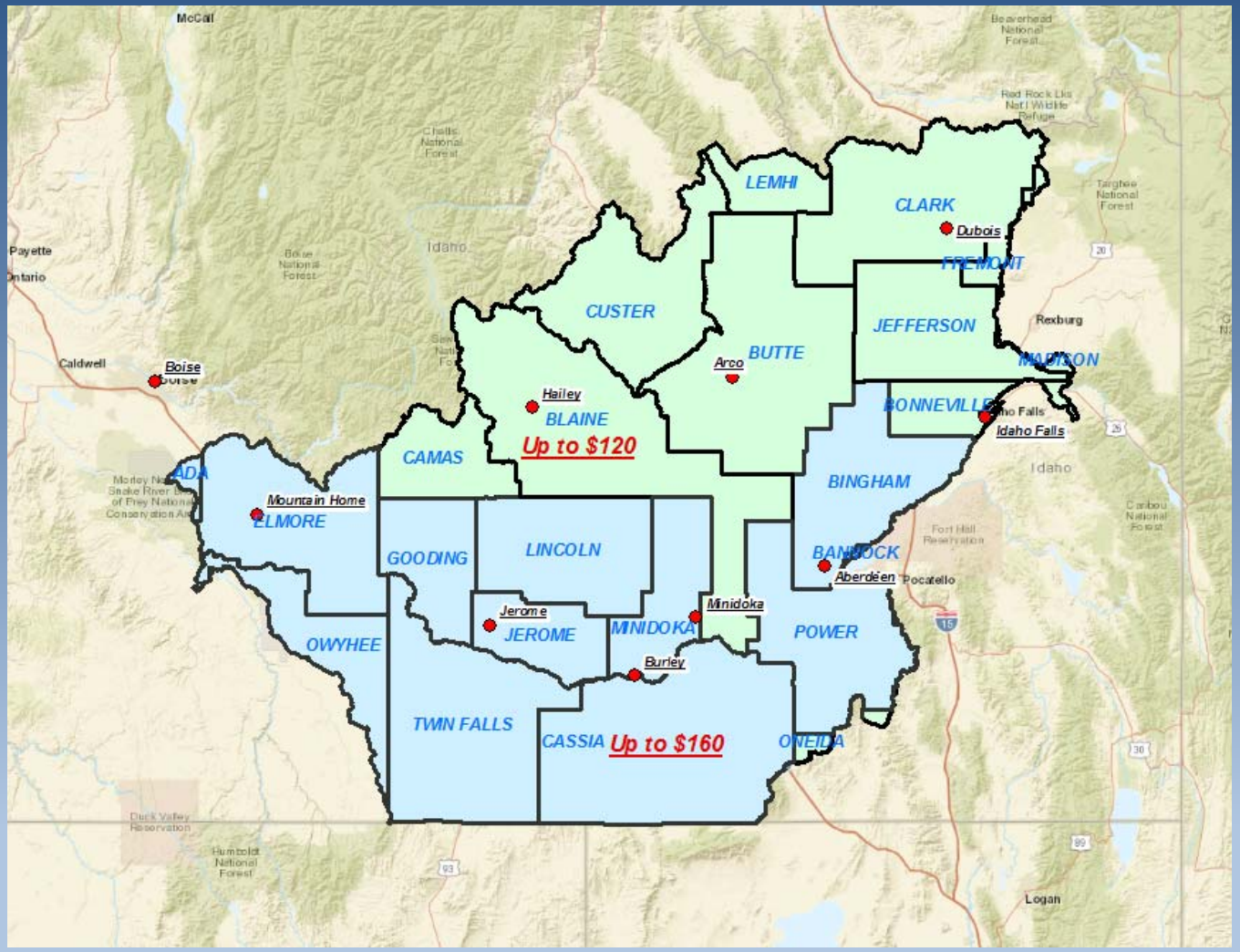


Conservation the Idaho Way: Sowing the Seeds of Stewardship

established 1939



established 1939



Conservation the Idaho Way: Sowing the Seeds of Stewardship

IDAHO SOIL & WATER CONSERVATION COMMISSION

Slide # 9

established 1939

Increasing incentives helps to make CREP a viable option

50,000 acres available to enroll
- 17,781 acres currently enrolled
32,219 +/- acres that can be enrolled

~64,000 Ac Ft. additional water savings annually *(25% of reduction goal)*

established 1939

What's next?

- 2018 Mid Management completions for 30 contracts
- Work with 25 new participants for seedbed preparations, weed control and seed recommendations and re-seeding needs.
- Follow up with field checks and pest management
- Prepare 20-40 new contracts and conservation plans as requested.
- Process revisions as requested.

established 1939

THANK YOU/QUESTIONS?

State of Idaho
CONSERVATION RESERVE ENHANCEMENT PROGRAM

Counties: Bannock · Bingham · Blaine · Bonneville · Butte Camas · Cassia · Clark · Custer · Elmore · Fremont · Gooding · Jefferson · Jerome · Lincoln · Madison · Minidoka · Owyhee · Power · Twin Falls

MEMO

TO: CHAIRMAN WRIGHT AND COMMISSIONERS TREBESCH, SLICHTER, ROEMER, AND RADFORD
FROM: CAROLYN FIRTH
DATE: March 29, 2018
RE: Final Report: Deep Soil Sampling Project for Marsh Creek, Minidoka, Twin Falls Priority Areas

Approximately two years ago your board approved a contract for the Commission to work with the Idaho Department of Environmental Quality (DEQ) on a project to conduct post-harvest deep soil sampling (PHDSS) in three nitrate priority areas located in Southern Idaho for the purpose of helping interested producers gain a better understanding of how their nutrient and irrigation water management practices on specific fields can impact ground water quality. DEQ agreed to provide $40,000 to fund the project, the money to be spent on a soil sampling contractor, a soil laboratory, and administrative costs (10 per cent) to the Commission for managing and administering the project. The purpose of this agenda item is to present the final report of the project, which concluded the end of December 2017.

Three Nitrate Priority Areas (NPAs) were chosen to sample: the Marsh Creek area, located in Cassia County, which is the #1 ranked NPA in the state in the 2014 DEQ rankings; the Minidoka NPA, located in Minidoka County, ranked #25 in the state, and the Twin Falls NPA, located in Twin Falls County, ranked #21. The study focused on the final effects of applied nutrient and irrigation water on soil test nitrogen and phosphorous concentrations. Measuring deep soil nitrate and phosphorous may help identify activities that contribute to nitrate ground water contamination and provide relatively quick feedback on the effectiveness of changes to management practices designed to reduce ground water contamination. In addition to having their fields sampled, producers were asked to complete a field history questionnaire. Information contained on the questionnaires, specific operators and locations of fields, and soil test results will remain confidential to the extent possible.

A total of 76 fields were sampled for the project. Of these fields, 36 were located within the Twin Falls NPA, 24 were located within the Marsh Creek NPA, and 16 were located within the Minidoka NPA. Seven of the 76 fields were sampled twice—once in the spring and once in the fall.

REQUESTED ACTION: For information only

Attachments:

- Final Report: Deep Soil Sampling Project for Marsh Creek, Minidoka, Twin Falls Priority Areas
- DSS Presentation PowerPoint

Deep Soil Sampling Project: Marsh Creek, Minidoka, and Twin Fall Nitrate Priority Areas
Idaho Soil and Water Conservation Commission
Final Report: March 2018

Description of Project

The Idaho Soil and Water Conservation Commission (ISWCC) conducted post-harvest deep soil sampling (PHDSS) to help interested land users see the relationship between management practices applied on a specific field and ground water quality impacts. Three Nitrate Priority Areas (NPAs) were chosen to sample: the Marsh Creek area, located in Cassia County, is the #1 ranked NPA in the state in the 2014 rankings; the Minidoka NPA, located in Minidoka County is ranked #25 in the state, and the Twin Falls NPA, located in Twin Falls County is ranked #21.

The purpose of the PHDSS project was to assist produces in demonstrating the relationship of applied nutrients and irrigation water in a field to ground water quality. The study focused on the final effects of applied nutrient and irrigation water on soil test nitrogen and phosphorous concentrations. Measuring deep soil nitrate and phosphorous may help identify activities that contribute to nitrate ground water contamination and provide relatively quick feedback on the effectiveness of changes to management practices designed to reduce ground water contamination.

Deep soil sampling was conducted with the goal of:

1) Establishing baseline data: Providing field specific baseline data regarding the nutrient content (nitrate, ammonium, and phosphorous) of soils underlying a variety of soil, crop, nutrient sources, and irrigation systems within the project area.
2) Educating producers: Providing the foundation for a technically based education program. The intent of the project was to provide field specific information to producers that they can use to evaluate their current nutrient and irrigation water management practices, and if necessary modify those practices, leading to reduced soil test concentrations and ultimately, improved ground water quality.
3) Serving as a pilot project: Providing information about project design, practical realities, time requirements and costs that can be used in developing subsequent project scopes.

Deep soil sampling was conducted for one growing season to collect baseline information. A basic description of how the project was implemented by the Idaho Soil and Water Conservation Commission (ISWCC) is summarized as follows:

1. Grower participation was solicited by general mailings and outreach by the ISWCC, local conservation districts, the Cassia County/Minidoka County Ground Water Quality Improvement Committee and the Twin Falls County Ground Water Quality Management Advisory Committee members.
2. Producer confidentiality: The ISWCC developed a process for data collection and analyses that adheres to Section 1619 of the 2014 Farm Bill and provides security to make every effort to ensure confidentiality of data, including the use of a unique

identification number system known only by the grower. Data and analyses generated were not tied to specific parcels or specifically identifiable locations.

3. Completion of a Deep Soil Sampling Program Questionnaire by the grower that includes information specific to an individual field such as pertinent management information including cropping systems, nitrogen sources and amounts, historical yields, irrigation practices and application methods. Information contained on the questionnaire will remain confidential.

ISWCC performed the following tasks:

- Through the State of Idaho competitive bidding process, generated and implemented contracts with selected contractors to collect soil samples and conduct laboratory analyses of the soil samples. EcoPoint, Incorporated (Kimberly, Idaho) was selected as the sampling contractor and Western Laboratories (Parma, Idaho) was selected as the contracted lab.
- Worked with the sampling contractor to identify potential sampling zones and producers. To be eligible to participate in the project, fields were required to be located within or near (1/4 mile) of a Source Water Assessment Area (SWA) and within or near (1/4 mile) of the Marsh Creek, Minidoka, or Twin Falls NPAs.
- Developed and implemented a data base management procedure to store and protect data confidentiality for participating producers.
- Generated published soil survey maps for each selected field and provided that information to the contractor.
- Worked with each producer to identify all buried private utilities (such as irrigation pipelines and electrical lines) on each field sampled and provided that information to the contractor.
- Provided guidance and oversight to the contractors to insure implementation of all phases of the sampling, analysis, and data management procedure as required.
- With the assistance of the contracted laboratory, established a secure system for producers to download their soil analyses data when it was posted by the laboratory.
- Assisted the Idaho Department of Environmental Quality (DEQ) in preparing a Quality Assurance Project Plan (QAPP) for the project.
- Worked with the USDA Agricultural Research Service (ARS) in obtaining performance samples (also known as blind or spiked samples) to comply with the QAPP requirements for the contracted laboratory.

<u>Description of Sampling Procedures and Protocols</u>

Soil sampling and analyses began in fall 2016. However, only two fields were sampled, due to the following reasons: 1) the ISWCC was unable to find an affordable sampling contractor, so NRCS offered to provide their probe truck and personnel to begin sampling. 2) Fall 2016 was very wet, so harvest was delayed significantly; farmers were still harvesting beans in November, which is unusual. 3) Winter began early, and the ground froze quickly, thus preventing the ability to take soil samples. The ISWCC was able to find an affordable sampling contractor in January 2017, so contracts were developed with the help of the Idaho Attorney General's office

for the sampling contractor and the soil laboratory. Sampling began in spring 2017 and concluded at the end of fall 2017. Sampling procedures included the following:

- Soil samples were taken after crop harvest but prior to nitrogen applications where possible.
- Samples were collected at 1-foot increments from 0 feet to a depth not exceeding 6 feet, or to the depth of refusal, such as basalt, gravel or caliche that defines the limits of a shallower potential root zone.
- The 0-1 foot soil samples were analyzed for pH, salts, sodium, CEC, lime, organic matter, the macronutrients (nitrate, ammonium, phosphorus, potassium, calcium, magnesium, and sulfate) and the micronutrients (zinc, iron, manganese, copper, and boron).
- Soil samples taken below 1 foot were analyzed for nitrate, ammonium, and phosphorous only.
- Soil descriptions were recorded in the field, and the NRCS Soil Series was identified. Soil descriptions included Munsell color, consistence, moisture, texture, and other noteworthy observations.
- Postage paid, self-addressed envelopes provided by ISWCC were given to the producers by the sampling contractor so the producers could mail their field history questionnaires to ISWCC.
- In addition to the envelopes, the contractor gave each producer a map of each field sampled, showing the Unique Identification Number (UIN), which was assigned by the contractor.
- The contractor flagged each field for Dig Line to identify the location of any public utilities.
- The contractor took duplicate samples and submitted blind samples to the lab as required by the QAPP.
- The contractor coordinated with the lab for delivery or pick-up of samples in a timely manner.
- The laboratory posted the test results online after samples were analyzed. The ISWCC and the producers were given login information in order to access the results.

A total of 76 fields were sampled for the project. Of these fields, 36 were located within the Twin Falls NPA, 24 were located within the Marsh Creek NPA, and 16 were located within the Minidoka NPA. Seven of the 76 fields were sampled twice—once in the spring and once in the fall. Thirteen producers participated in the Twin Falls sampling; six producers participated in the Marsh Creek sampling; and five producers participated in the Minidoka sampling for an overall total of 24 producers for the project.

In regards to following quality assurance and control protocols for this project, a DEQ staff member (Flint Hall) conducted an analysis of the duplicate samples and blind samples to determine whether or not the lab data was within the variability allowed by the parameters specified by the QAAP. He concluded that overall, the quality assurance goals for the duplicates and the blinds were met. Flint also conducted a field audit and found that proper procedures were followed. Details of Flint's analysis are as follows:

Post-Harvest Deep Soil Sampling Quality Control Review (written by Flint Hall)

Quality assurance was documented through the use of field QC checks (duplicates and PE-"Known" samples), standard sampling and analysis methods, and a field QA audit of sampling.

Precision goals were assessed with duplicate samples collected as "splits" – two subsamples drawn from the same soil volume, shipped and analyzed concurrently. The samples collected were composited from five separate sites from across the field sampled as with regular samples. The first subsample drawn was the primary sample, the second subsample drawn was the duplicate or split sample.

Six sets of duplicate soil samples were collected, analyzed nitrate, ammonium, and phosphorus, and compared to Relative Percent Difference (RPD) goals for samples where both the primary sample and the duplicate exceeded five times the laboratory reporting level, and compared to ± the laboratory reporting level for samples where one or both were < five times the reporting level (Table 1). For those six sets, one location yielded samples for 1-3 ft depths, and five locations with 1-6 ft depths, for a total of 33 individual samples and subsamples compared for the six locations. Initially, comparison criteria typically utilized for well-homogenized sample media such as water were used; 20% RPD, ± MDL for samples < 5* MDL. For these criteria, only analyses for nitrates met comparison goals, and overall comparisons failed to meet goals. Reproducibility goals more typical for soil matrices are 50% RPD and ± 2*MDL for samples < 5* MDL. With these more relaxed goals, all replicate samples met comparison criteria. Discussion with April Leytem, NRCS, suggests that the original goals of 20% RPD, ± MDL for samples < 5* MDL are more restrictive than necessary for soil sampling and the analytical level of soil analysis, and the observed results are appropriate and should be considered in control. Future soil sampling should consider the more relaxed goals of 50% RPD and ± 2*MDL for samples < 5* MDL for duplicate comparison.

Accuracy goals for the project were assessed by submitting four sets of "known" PE samples. ARS, Kimberly provided a known soil matrix that was submitted as a "blind" with the regular samples. A total of four blinds were submitted over the course of the project, with an initial percent recovery goal of 80%. Blind samples were analyzed for nitrate, ammonia and phosphorus, with percent recovery goals met for three of four nitrate analyses, zero of four ammonium, and zero of four phosphorus samples. Recoveries for nitrate ranged from 117% -149%, for ammonia, 78% - 186%, and for phosphorus, 47% - 204%. Sample analysis dates ranged from 5/4/17 – 11/22/17. QC sample results were reviewed with April Leytem. She suggested that recovery goals of 80-120% recovery are appropriate. Standard practice would be to rerun samples that fell outside controls. In the future, that corrective action should be considered for inclusion in data review procedures. As the primary objective of nutrient monitoring for this sampling is change from preplanting to post harvest, and concentration with depth, the potential lack of accuracy does not compromise project objectives.

Quality Assurance goals for this project called for at least 10% of samples to be field QC samples. A total of 76 sites were sampled; with these, duplicates were submitted for 6 sites, and four blind PE samples, for a total of 10 "QC" sites, meeting the goal of 10% field QC for sites. Approximately 10% of sites were QC sites, and with 37 field QC samples submitted for the 410 standard samples, the 10% field QC goal was met.

A quality assurance field audit was conducted 12/11/17. The project manager for ISWCC and the project QAO observed sampling for a field site. Review of methods used in the field, data forms completed, sample collection and handling confirmed that sampling was conducted in accordance with the project QAPP with no discrepancies.

Tables Showing Soil Analysis Results, Cropping Histories, and Fertilizer Applications

All of the raw data generated from Western Laboratories is shown in Table 6. The original spreadsheets as prepared by Western Laboratories were meant to provide the producers with all of the related soil test data needed to manage their nutrient programs. In order to make the data more meaningful to this study, two summary spreadsheets were created—one for the spring sampling and one for the fall sampling (Tables 1 and 2). These sheets included only the following parameters from Western's spreadsheets: soil texture, per cent organic matter, nitrate (NO3), ammonium (NH4), and phosphorous (P). The values from the nitrate and ammonium columns were totaled as parts per million (ppm) and shown in a separate column. Another column was added to show pounds of nitrogen. The values in this column were determined by multiplying the nitrogen ppm values by four, which is the standard conversion factor used in the University of Idaho Fertilizer Guides to convert nitrogen from ppm to pounds. A line was added at the bottom of each field sampled to show the total amounts of nitrogen and phosphorous from all depth intervals.

Information from the grower field history questionnaires was added to the summary spreadsheets. This information included the following: current crop, yield, past crop, and answers to the following questions concerning nutrient and irrigation management of each field:

a. Soil Samples Y/N: Have soil samples for purpose of generating a nutrient budget been taken in the past?
b. Fertilizer Y/N: Has commercial Fertilizer been added to the field in the past?
c. Manure Y/N: Has animal waste been added to the field in the past?
d. Both Y/N: Have both commercial fertilizer and animal waste been added to the field in the past?
e. Irr. Sys. Sur./Spk: Is the current irrigation system a surface or sprinkler irrigation system? For sprinkler irrigation, answers included either pivot, wheeline (abbreviated WL), or handline (abbreviated HL).
f. Moisture Sensor Y/N: Are moisture sensors installed in the field and results used to manage rates and dates of irrigation water application? In some cases, although the producer did not use moisture sensors, he indicated using evapo-transpiration data from AgriMet stations (abbreviated as ET).
g. Std. Scheduling Y/N: In lieu of using moisture sensors does the producer use a standard cycle scheduling system for applying irrigation water?

The numbers used to represent soil texture groups are as follows: 1 = Sand; 2 = Loamy sand; 3 = Sandy loam; 4 = Loam; 5 = Silt loam.

Observations and Interpretations

For the spring sampling, fields that showed the highest nitrogen concentrations were planted in corn or beans. All of the corn fields which had high nitrogen values and some of the bean fields with elevated nitrogen reported having had manure applied. For fields sampled in the fall, the highest nitrogen concentrations were in fields in which the crop had been wheat, potatoes, or beans.

Overall, fields with the highest nitrogen and phosphorous values were those that had been planted in corn, were surface irrigated, and had both commercial fertilizer and manure applied. Total nitrogen for those fields was over 400 pounds per acre, and phosphorous was in the range of 80 to 140 ppm.

Throughout the entire project area, the soil textures of the fields sampled were almost equally split between sandy loams and loams, with a few silt loams. The average per cent organic matter was about 1.5, which is very close to background values. This indicates that little additional organic matter has been added over time in the past. However, the field history questionnaires indicated that at least a third of the fields sampled have had manure applied in the past. The low values for organic matter may also indicate high intensity tillage operations, which leave little crop residue.

This study is similar in several ways (soil texture, per cent organic matter, and sample results) to PHDSS that has been conducted by the Kimberly USDA-ARS in the Shoshone-Bannock Fort Hall Reservation located near Pocatello. Both projects show areas of elevated phosphorous concentrations at soil depths greater than one foot. Background levels of phosphorous at the two-foot and deeper depths is normally in the area of 5 ppm. Based on the data in the Fort Hall study, ARS concluded that by the end of the growing and irrigation season, most of the nitrogen had already leached through the 6-foot profile and was gone. That could be the case in some areas of this study. However, there are several fields in the Mini-Cassia and Twin Falls areas with relatively high concentrations of nitrogen throughout the entire 6-foot profile.

Seven fields within the study area were sampled both spring and fall. A comparison of these results is shown in Table 3. Not many observations can be drawn from this comparison, other than nitrate concentrations indicate migration of nitrogen downward. One field shows a high carryover of nitrogen from the previous fall (316 pounds).

Producer feedback from participation in this project has been very positive. Producers were impressed with the quality of work done by the sampling contractor and they liked being able to go online to Western Lab's website to view their results. More work can be done in the way of educating individual producers as to possible relationships of their soil test values to their management practices. This will be an ongoing process, even though the project has officially concluded. Producers who did not participate in the project, including some who farm within the North Side Soil and Water Conservation District (Jerome County) have expressed an interest in doing deep soil sampling in the future.

Field history questionnaires were returned for 86 per cent of the fields sampled. Some of the questionnaires were very brief, while others had good detail.

The sampling contractor was very good to work with. He was prompt and thorough in communicating with farmers, Dig Line, Western Labs, and the ISWCC. He kept good field records. He and his employee (a soil scientist) compiled a poster, which they presented at the DEQ annual water quality workshop in Boise in January 2018. A thumbnail picture of the poster is included at the end of this report.

Summary Tables Showing Ranges of Nitrate and Phosphorous

Highest and lowest values of nitrogen and phosphorous, along with the corresponding crops, irrigation types, and fertilizer applications are shown in Tables 4 and 5 (spring sampling is shown in Table 4 and fall sampling in Table 5). Highest and lowest values are shown by individual depth intervals, as well as by the total depth profile sampled. Details on individual fields are shown below the summary tables. It is interesting to note that the highest nitrogen value (304 pounds per acre) was found in an alfalfa field at the 1-2 foot depth interval. This field also had the highest total nitrogen overall--904 pounds per acre.

To summarize the entire project, much interesting data was collected, including data that showed some very high concentrations of nitrogen and phosphorous in certain fields. This would indicate that some farmers should seriously consider altering their nutrient and irrigation management practices, not only to protect ground water, but to save money they are spending on fertilizer that is not being utilized by the crops, is being leached downward or lost to the atmosphere, or building up in the soil at depths that cannot be utilized by certain crops. This information will provide a good basis for educational and outreach efforts to help address the nitrate problems within the three NPAs that were studied. From a logistics standpoint, much was learned contracting, finding and working with contractors, data management, and working with producers.

TABLE 1

2017 Spring Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co

			Soil Sample				Fertilizer	Manure	Both	Irr. Sys	Moisture	Std. Sched.			Total	Total	ppm
Field ID	**Crop**	**Yield**	**Past Crop**	**Y/N**	**Texture**	**%OM**	**Y/N**	**Y/N**	**Y/N**	**Sur./spk**	**Sen. Y/N**	**Y/N**	**NO3**	**NH4**	**ppm**	**Lbs. N**	**P**
67-03-01	Alfalfa	7 t/ac	Wheat	Y 1/yr	3	1.4	Y	Y	N	WL	N	N	10	3	13	52	18
67-03-12	Alfalfa	7 t/ac	Wheat	Y 1/yr			Y	Y	N	WL	N	N	3	1	4	16	9
67-03-23	Alfalfa	7 t/ac	Wheat	Y 1/yr			Y	Y	N	WL	N	N	2	1	3	12	12
67-03-34	Alfalfa	7 t/ac	Wheat	Y 1/yr			Y	Y	N	WL	N	N	2	1	3	12	3
67-03-45	Alfalfa	7 t/ac	Wheat	Y 1/yr			Y	Y	N	WL	N	N	3	1	4	16	4
67-03-56	Alfalfa	7 t/ac	Wheat	Y 1/yr			Y	Y	N	WL	N	N	5	2	7	28	4
Total N; ppm P															34	136	50
67-15-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.4	Y	N	N	WL	N	Y	3	1	4	16	18
67-15-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
67-15-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	5
67-15-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	7
67-15-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	8
67-15-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	6
Total N; ppm P															19	76	47
67-06-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	4	1	5	20	13
67-06-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	7
67-06-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
67-06-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
67-06-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	4
67-06-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
Total N; ppm P															20	80	33
31-01-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.5	Y	N	N	Pivot	Y	N	7	2	9	36	21
31-01-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	3	1	4	16	8
31-01-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	9
31-01-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	11
31-01-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	7
31-01-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	3
Total N; ppm P															25	100	59
31-2648-1-1	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	Pivot	Y	N	2	3	5	20	20
31-2648-1-2	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	19
31-2648-1-3	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	11
31-2648-1-4	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	6
31-2648-1-5	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	6	8	32	12
31-2648-1-6	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	4	3	7	28	8
Total N; ppm P															35	140	76

TABLE 1

2017 Spring Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co

			Soil Sample				Fertilizer	Manure	Both	Irr. Sys	Moisture	Std. Sched.			Total	Total	ppm
Field ID	**Crop**	**Yield**	**Past Crop**	**Y/N**	**Texture**	**%OM**	**Y/N**	**Y/N**	**Y/N**	**Sur./spk**	**Sen. Y/N**	**Y/N**	**NO3**	**NH4**	**ppm**	**Lbs. N**	**P**
31-2648-3-1	Beans	24 cwt/ac	Beans	Y 1/yr	3	1.4	Y	N	N	Pivot	Y	N	9	3	12	48	15
31-2648-3-2	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	7	3	10	40	7
31-2648-3-3	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	6	3	9	36	4
31-2648-3-4	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	6	3	9	36	5
31-2648-3-5	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	7
31-2648-3-6	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	9
Total N; ppm P																52	208	47
83-10-01	Alfalfa	5 t/ac	Alfalfa	Y 1/yr	3	1.4	Y	Y	Y	Pivot	N	Y	7	3	10	40	6
83-10-12	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	7	2	9	36	5
83-10-23	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	6	1	7	28	4
83-10-34	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	8	2	10	40	13
83-10-45	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	5	2	7	28	3
83-10-56	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	8	3	11	44	4
Total N; ppm P																54	216	28
83-11-01	Alfalfa	5 t/ac	Alfalfa	Y 1/yr	3	1.5	Y	Y	Y	Pivot	N	Y	20	3	23	92	33
83-11-12	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	8	3	11	44	4
83-11-23	Alfalfa	5 t/ac	Alfalfa	Y 1/yr			Y	Y	Y	Pivot	N	Y	8	2	10	40	4
Total N; ppm P																44	176	41
83-12-01					4	1.6							19	2	21	84	47
83-12-12													10	1	11	44	3
83-12-23													4	1	5	20	3
83-12-34													6	2	8	32	4
83-12-45													4	1	5	20	3
83-12-56													8	1	9	36	3
Total N; ppm P																59	236	63
83-13-01					4	1.4							15	2	17	68	15
83-13-12													7	2	9	36	6
83-13-23													7	3	10	40	3
83-13-34													8	4	12	48	7
83-13-45													6	1	7	28	3
83-13-56													9	2	11	44	10
Total N; ppm P																66	264	44
83-14-01					4	1.3							13	1	14	56	13
83-14-12													5	1	6	24	4
83-14-23													6	2	8	32	3
83-14-34													6	2	8	32	10
83-14-45													4	2	6	24	8
83-14-56													6	1	7	28	17
Total N; ppm P																49	196	55

TABLE 1

2017 Spring Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co

			Soil Sample				Fertilizer	Manure	Both	Irr. Sys	Moisture	Std. Sched.			Total	Total	ppm
Field ID	**Crop**	**Yield**	**Past Crop**	**Y/N**	**Texture**	**%OM**	**Y/N**	**Y/N**	**Y/N**	**Sur./spk**	**Sen. Y/N**	**Y/N**	**NO3**	**NH4**	**ppm**	**Lbs. N**	**P**
83-15-01													19	2	21	84	16
83-15-12													9	1	10	40	4
83-15-23													7	1	8	32	5
83-15-34													16	5	21	84	3
83-15-45													3	1	4	16	4
83-15-56													3	3	6	24	14
Total N; ppm P															70	280	46
83-16-01	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	9	1	10	40	6
83-16-12	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	7	6	13	52	3
83-16-23	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	6	1	7	28	3
83-16-34	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	8	4	12	48	4
83-16-45	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	2	1	3	12	3
83-16-56	Barley	104 bu/ac	Barley	Y			Y	N	N	Pivot	ET	N	8	1	9	36	8
Total N; ppm P															54	216	27
31-05-0-1	Beans	30 cwt/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	Pivot	Y	N	15	4	19	76	12
31-05-1-2	Beans	30 cwt/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	14	2	16	64	9
31-05-2-3	Beans	30 cwt/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	10	2	12	48	7
31-05-3-4	Beans	30cwt/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	8	2	10	40	11
31-05-4-5	Beans	30 cwt/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	2	4	16	8
31-05-5-6	Beans	30 cwt/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	2	4	16	14
Total N, ppm P															146	584	61
31-06-0-1	Beans	24 cwt/ac	Beans	Y 1/yr	3	1.1	Y	N	N	Pivot	Y	N	15	4	19	76	24
31-06-1-2	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	10	3	13	52	5
31-06-2-3	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	5	2	7	28	3
31-06-3-4	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	7	3	10	40	13
31-06-4-5	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	4	5	9	36	7
31-06-5-6	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	8
Total N; ppm P															64	256	60
67-01-0-1	Beans	31 cwt/ac	M Barley	Y 1/yr	3	1.4	Y	N	N	Pivot	ET	N	9	2	11	44	15
67-01-1-2	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	9	36	16
67-01-2-3	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	6	9	36	5
67-01-3-4	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	6
67-01-4-5	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	5	20	5
67-01-5-6	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	3	5	20	9
Total N; ppm P															43	172	56
83-17-0-1	Corn	200 bu/ac	Corn	Y 1/yr	4	1.4	N	Y	N	Pivot	N	Y	21	4	25	100	8
83-17-1-2	Corn	200 bu/ac	Corn	Y 1/yr			N	Y	N	Pivot	N	Y	22	3	25	100	1
83-17-2-3	Corn	200 bu/ac	Corn	Y 1/yr			N	Y	N	Pivot	N	Y	37	5	42	164	3
83-17-3-4	Corn	200 bu/ac	Corn	Y 1/yr			N	Y	N	Pivot	N	Y	37	6	43	172	4
Total N; ppm P															135	540	16

TABLE 1

2017 Spring Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co

			Soil Sample				Fertilizer	Manure	Both	Irr. Sys	Moisture	Std. Sched.			Total	Total	ppm
Field ID	**Crop**	**Yield**	**Past Crop**	**Y/N**	**Texture**	**%OM**	**Y/N**	**Y/N**	**Y/N**	**Sur./spk**	**Sen. Y/N**	**Y/N**	**NO3**	**NH4**	**ppm**	**Lbs. N**	**P**
83-19-0-1	Beans	30 cwt/ac	Beans	Y biennial	3	1.3	N	Y	N	surface	N	Y	19	2	21	84	12
83-19-1-2	Beans	30 cwt/ac	Beans	Y biennial			N	Y	N	surface	N	Y	18	2	20	80	12
83-19-2-3	Beans	30 cwt/ac	Beans	Y biennial			N	Y	N	surface	N	Y	14	2	16	64	4
83-19-3-4	Beans	30 cwt/ac	Beans	Y biennial			N	Y	N	surface	N	Y	19	3	22	44	5
83-19-4-5	Beans	30 cwt/ac	Beans	Y biennial			N	Y	N	surface	N	Y	18	2	20	80	4
83-19-5-6	Beans	30 cwt/ac	Beans	Y biennial			N	Y	N	surface	N	Y	11	3	14	56	5
Total N; ppm P															113	452	42
83-20-01	Corn	200 bu/ac	Corn	Y biennial	3	1.4	N	Y	N	surface	N	Y	22	4	26	104	11
83-20-1-2	Corn	200 bu/ac	Corn	Y biennial			N	Y	N	surface	N	Y	17	4	21	84	8
83-20-2-3	Corn	200 bu/ac	Corn	Y biennial			N	Y	N	surface	N	Y	8	3	11	44	5
83-20-3-4	Corn	200 bu/ac	Corn	Y biennial			N	Y	N	surface	N	Y	9	4	12	48	8
83-20-4-5	Corn	200 bu/ac	Corn	Y biennial			N	Y	N	surface	N	Y	5	2	7	28	6
83-20-5-6	Corn	200 bu/ac	Corn	Y biennial			N	Y	N	surface	N	Y	4	1	5	20	13
Total N; ppm P															82	328	51
83-18-0-1	Corn	200 bu/ac	Beans	Y biennial	3	1.3	N	Y	N	surface	N	Y	7	3	10	40	7
83-18-1-2	Corn	200 bu/ac	Beans	Y biennial			N	Y	N	surface	N	Y	5	4	9	36	4
83-18-2-3	Corn	200 bu/ac	Beans	Y biennial			N	Y	N	surface	N	Y	2	3	5	20	5
83-18-3-4	Corn	200 bu/ac	Beans	Y biennial			N	Y	N	surface	N	Y	2	2	4	16	7
83-18-4-5	Corn	200 bu/ac	Beans	Y biennial			N	Y	N	surface	N	Y	3	3	6	24	6
83-18-5-6	Corn	200 bu/ac	Beans	Y biennial			N	Y	N	surface	N	Y	3	3	6	24	4
Total N; ppm P															40	160	33
83-21-0-1	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.3	N	Y	N	Pivot	N	Y	6	3	9	36	24
83-21-1-2	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	Pivot	N	Y	2	4	6	24	18
83-21-2-3	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	Pivot	N	Y	2	4	6	24	10
Total N; ppm P															21	84	52
83-22-0-1	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.4	N	Y	N	WL	N	Y	6	3	9	36	42
83-22-1-2	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	4	16	8
83-22-2-3	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	3
83-22-3-4	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	13
83-22-4-5	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	3	6	24	11
Total N; ppm P															29	116	77
31-03-0-1	Corn	30 t/ac	Beets	Y 1/yr	4	1.5	N	N	N	Pivot	N	Y	57	5	62	248	25
31-03-1-2	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	8	4	12	48	8
31-03-2-3	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	3	5	20	3
Total N; ppm P															79	316	36

TABLE 1

2017 Spring Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co

			Soil Sample				Fertilizer	Manure	Both	Irr. Sys	Moisture	Std. Sched.			Total	Total	ppm
Field ID	**Crop**	**Yield**	**Past Crop**	**Y/N**	**Texture**	**%OM**	**Y/N**	**Y/N**	**Y/N**	**Sur./spk**	**Sen. Y/N**	**Y/N**	**NO3**	**NH4**	**ppm**	**Lbs. N**	**P**
83-01-1	Corn	217 bu/ac	Alfalfa	Y triennial	5	1.6	Y	Y	Y	surface	N	Y	24	2	26	104	77
83-01-2	Corn	217 bu/ac	Alfalfa	Y triennial			Y	Y	Y	surface	N	Y	33	1	34	136	17
83-01-3	Corn	217 bu/ac	Alfalfa	Y triennial			Y	Y	Y	surface	N	Y	29	1	30	120	14
83-01-4	Corn	217 bu/ac	Alfalfa	Y triennial			Y	Y	Y	surface	N	Y	23	1	24	96	34
Total N; ppm P															114	456	142
83-02-1	Corn	217 bu/ac	Alfalfa	Y triennial	5	1.7	Y	Y	Y	Pivot	N	Y	19	3	22	88	38
83-02-2	Corn	217 bu/ac	Alfalfa	Y triennial			Y	Y	Y	Pivot	N	Y	46	1	47	188	15
Total N; ppm P															69	276	53
83-03-1	Alfalfa	7 t/ac	Alfalfa	Y triennial	5	1.4	N	N	N	surface	N	Y	13	1	14	56	24
83-03-2	Alfalfa	7 t/ac	Alfalfa	Y triennial			N	N	N	surface	N	Y	16	1	17	68	22
Total N; ppm P															69	276	46
83-04-1	Alfalfa	8 t/ac	Alfalfa	Y triennial			N	Y	N	Pivot	N	Y	12	5	17	68	13
83-04-2	Alfalfa	8 t/ac	Alfalfa	Y triennial			N	Y	N	Pivot	N	Y	29	1	30	120	55
83-04-3	Alfalfa	8 t/ac	Alfalfa	Y triennial			N	Y	N	Pivot	N	Y	30	1	31	124	26
Total N; ppm P															78	312	94
83-05-1	Beans	30 cwt/ac	Corn	Y 1/yr	4	1.5	Y	Y	Y	Pivot	N	Y	10	3	13	52	31
83-05-2	Beans	30 cwt/ac	Corn	Y 1/yr			Y	Y	Y	Pivot	N	Y	12	1	13	52	13
83-05-3	Beans	30 cwt/ac	Corn	Y 1/yr			Y	Y	Y	Pivot	N	Y	5	1	6	24	13
83-05-4	Beans	30 cwt/ac	Corn	Y 1/yr			Y	Y	Y	Pivot	N	Y	6	1	7	28	12
Total N; ppm P															39	156	69
83-06-1	Beans	30 cwt/ac	Corn	Y 1/yr	4	1.6	Y	Y	Y	Pivot	N	Y	8	1	9	36	13
83-06-2	Beans	30 cwt/ac	Corn	Y 1/yr			Y	Y	Y	Pivot	N	Y	15	1	16	64	55
83-06-3	Beans	30 cwt/ac	Corn	Y 1/yr			Y	Y	Y	Pivot	N	Y	6	1	7	28	26
Total N; ppm P															32	128	94
83-07-1	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	7	1	8	32	29
83-07-2	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	14	1	15	60	9
83-07-3	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	20	1	21	84	11
83-07-4	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	18	1	19	76	10
83-07-5	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	10	1	11	44	15
83-07-6	Corn	30 t/ac	Wheat	Y 1/yr			Y	Y	Y	Pivot	N	Y	13	1	14	56	10
Total N; ppm P															88	352	84
83-08-1					4	1.4							16	1	17	68	60
83-08-2													14	1	15	60	16
Total N; ppm P															39	156	76
83-09-1					5	1.4							14	2	16	64	38
83-09-2													27	1	28	112	15
83-09-3													17	1	18	72	10
83-09-4													7	1	8	32	13
Total N; ppm P															70	280	76

TABLE 2

2017 Fall PHDSS
Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
31-14-01	Potatoes	500 cwt/ac	Barley	Y 1/yr	3	1.5	Y	Y	Y	HL	Y	N	9	3	12	48	44
31-14-12	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	7	1	8	32	21
31-14-23	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	1	3	12	7
31-14-34	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	1	3	12	7
31-14-45	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	1	3	12	8
31-14-56	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	1	3	12	6
Total N and ppm P															32	128	93
31-15-01	Potatoes	500 cwt/ac	Barley	Y 1/yr	5	1.6	Y	Y	Y	Pivot	Y	N	26	1	27	108	50
31-15-12	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	Pivot	Y	N	13	1	14	56	19
31-15-23	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	Pivot	Y	N	11	1	12	48	9
31-15-34	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	Pivot	Y	N	4	1	5	20	4
31-15-45	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	Pivot	Y	N	4	1	5	20	13
31-15-56	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	Pivot	Y	N	2	2	4	16	7
Total N and ppm P															67	268	102
31-16-01	Potatoes	500 cwt/ac	Barley	Y 1/yr	4	1.7	Y	Y	Y	HL	Y	N	8	3	11	44	41
31-16-12	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	8	1	9	36	31
31-16-23	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	4	2	6	24	14
31-16-34	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	3	1	4	16	16
31-16-45	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	3	2	5	20	4
31-16-56	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	2	4	16	7
Total N and ppm P															39	156	113
67-28-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.6	Y	N	N	WL	N	Y	3	1	4	16	21
67-28-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	11
67-28-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	3	5	20	3
67-28-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	3	5	20	8
67-28-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	5
67-28-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	3	5	20	9
Total N and ppm P															27	108	57
67-29-01	Potatoes	550 cwt/ac	Barley	Y 1/yr	5	1.8	Y	N	N	WL	N	Y	12	1	13	52	25
67-29-12	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	5	1	6	24	6
67-29-23	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	7	1	8	32	9
67-29-34	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	4	1	5	20	6
67-29-45	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	10
67-29-56	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	13	2	15	60	4
Total N and ppm P															50	200	60
67-30-01	Potatoes	550 cwt/ac	Barley	Y 1/yr	5	1.4	Y	N	N	WL	N	Y	20	1	21	84	21
67-30-12	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	7	11	18	72	4
67-30-23	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	8	1	9	36	3
67-30-34	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	6	1	7	28	15
67-30-45	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	4	1	5	20	10
67-30-56	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	4
Total N and ppm P															63	252	57
67-05-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.5	Y	N	N	WL	N	Y	2	3	5	20	10
67-05-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	16
67-05-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	11
67-05-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	9
67-05-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	5
67-05-56	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
Total N and ppm P															21	84	54

TABLE 2

2017 Fall PHDSS
Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
67-06-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	3	1.6	Y	N	N	WL	N	Y	2	1	3	12	12
67-06-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	3	1	4	16	17
67-06-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	19	6	25	100	3
67-06-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
67-06-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	3
67-06-56	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	22	2	24	96	4
Total N and ppm P															63	252	42
31-07-01	Alfalfa	5 t/ac	Alfalfa	Y	4	1.6	Y	N	N	Surface	N	Y	8	3	11	44	26
31-07-12	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	6	2	8	32	23
31-07-23	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	3	2	5	20	10
31-07-34	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	2	1	3	12	2
31-07-45	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	3	2	5	20	5
31-07-56	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	2	1	3	12	6
Total N and ppm P															35	140	72
31-08-01	Corn	33 t/ac	Corn	Y	4	1.7	Y	Y	Y	Surface	N	Y	38	5	43	172	49
31-08-12	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	11	4	15	60	28
31-08-23	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	6	3	9	36	8
31-08-34	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	27	5	32	128	12
31-08-45	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	5	3	8	32	2
31-08-56	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	6	3	9	36	2
Total N and ppm P															116	464	101
31-09-01	Barley	130 bu/ac	Corn	Y	4	1.5	Y	Y	Y	Surface	N	Y	18	4	22	88	40
31-09-12	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	16	4	20	80	8
31-09-23	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	11	3	14	56	23
31-09-34	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	17	5	22	88	3
31-09-45	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	11	4	15	60	2
31-09-56	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	8	4	12	48	5
Total N and ppm P															105	420	81
31-10-01	Barley	130 bu/ac	Beets	Y	4	1.6	Y	Y	Y	Surface	N	Y	41	5	46	184	37
31-10-12	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	10	6	16	64	20
31-10-23	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	10	5	15	60	3
31-10-34	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	8	4	12	48	2
31-10-45	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	6	3	9	36	3
31-10-56	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	5	2	7	28	3
Total N and ppm P															105	420	68
31-11-12	Beets	41 t/ac	Barley	Y	3	1.7	Y	N	N	WL	N	Y	3	1	4	16	8
31-11-23	Beets	41 t/ac	Barley	Y			Y	N	N	WL	N	Y	2	1	3	12	8
31-11-34	Beets	41 t/ac	Barley	Y			Y	N	N	WL	N	Y	2	2	4	16	15
31-11-45	Beets	41 t/ac	Barley	Y			Y	N	N	WL	N	Y	2	2	4	16	2
31-11-56	Beets	41 t/ac	Barley	Y			Y	N	N	WL	N	Y	2	1	3	12	3
Total N and ppm P															18	72	36
31-12-12	Alfalfa	6.5 t/ac	Alfalfa	Y	5	1.6	N	N	N	WL	N	Y	5	4	9	36	2
31-12-23	Alfalfa	6.5 t/ac	Alfalfa	Y			N	N	N	WL	N	Y	6	3	9	36	3
31-12-34	Alfalfa	6.5 t/ac	Alfalfa	Y			N	N	N	WL	N	Y	2	2	4	16	4
31-12-45	Alfalfa	6.5 t/ac	Alfalfa	Y			N	N	N	WL	N	Y	2	1	3	12	4
31-12-56	Alfalfa	6.5 t/ac	Alfalfa	Y			N	N	N	WL	N	Y	2	1	3	12	3
Total N and ppm P															28	112	16

TABLE 2

2017 Fall PHDSS

Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
31-13-12	Barley	130 bu/ac	Beets	Y	4	1.7	Y	N	N	WL	N	Y	6	4	10	40	14
31-13-23	Barley	130 bu/ac	Beets	Y			Y	N	N	WL	N	Y	3	2	5	20	10
31-13-34	Barley	130 bu/ac	Beets	Y			Y	N	N	WL	N	Y	17	5	22	88	4
31-13-45	Barley	130 bu/ac	Beets	Y			Y	N	N	WL	N	Y	6	3	9	36	5
31-13-56	Barley	130 bu/ac	Beets	Y			Y	N	N	WL	N	Y	3	2	5	20	3
Total N and ppm P															51	204	41
83-28-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	5	1.6	Y	N	N	WL	N	Y	10	4	14	56	9
83-28-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	8	3	11	44	9
83-28-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	5	3	8	32	11
83-28-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	6
83-28-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	3	2	5	20	3
83-28-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
Total N and ppm P															45	180	41
83-30-01	Peas	25 cwt/ac	fallow	Y	3	1.4	Y	Y	Y	Pivot	N	N	3	4	7	28	2
83-30-12	Peas	25 cwt/ac	fallow	Y			Y	Y	Y	Pivot	N	N	8	3	11	44	2
83-30-23	Peas	25 cwt/ac	fallow	Y			Y	Y	Y	Pivot	N	N	8	3	11	44	3
Total N and ppm P															29	116	7
83-29-01	Wheat	125 bu/ac	Wheat	Y	4	1.3	Y	Y	Y	Pivot	N	N	4	3	7	28	6
83-29-12	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	7	3	10	40	2
83-29-23	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	9	3	12	48	10
83-29-34	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	6	2	8	32	16
83-29-45	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	8	2	10	40	11
83-29-56	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	5	3	8	32	13
Total N and ppm P															55	220	58
83-24-01	Barley	140 bu/ac	Potatoes	Y	4	1.2	Y	N	N	Pivot	Y	N	35	3	40	160	54
83-24-12	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	19	4	23	92	4
83-24-23	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	7	3	10	40	3
83-24-34	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	8	3	11	44	4
83-24-45	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	7	3	10	40	2
83-24-56	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	7	2	9	36	2
Total N and ppm P															103	412	19
83-25-01	M Barley	140 bu/ac	Beans	Y 1/yr	4	1.3	Y	N	N	Pivot	Y	N	21	3	24	96	31
83-25-12	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	10	3	13	52	4
83-25-23	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	9	36	2
83-25-34	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	9	36	2
83-25-45	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	9	36	7
83-25-56	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	4	4	8	32	4
Total N and ppm P															72	288	19
67-16-01	Wheat	120 bu/ac	Beans	Y 1/yr	3	1.6	N	Y	N	WL	N	Y	24	3	27	108	19
67-16-12	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	15	3	18	72	2
67-16-23	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	8	4	12	48	12
67-16-34	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	10	3	13	52	10
67-16-45	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	3	3	6	24	3
67-16-56	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	3	3	6	24	5
Total N and ppm P															82	328	51
67-02-01	Beans	30 cwt/ac	Barley	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	9	4	13	52	11
67-02-12	Beans	30 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	6	2	8	32	13
67-02-23	Beans	30 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	3	2	5	20	3
67-02-34	Beans	30 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	4	2	6	24	6
67-02-45	Beans	30 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	5	2	7	28	3
67-02-56	Beans	30 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	7	2	36	36	5
Total N and ppm P															48	192	41

TABLE 2

2017 Fall PHDSS
Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
67-01-01	Beans	31 cwt/ac	M Barley	Y 1/yr	3	1.4	Y	N	N	Pivot	ET	N	8	2	10	40	10
67-01-12	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	5	20	4
67-01-23	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	9
67-01-34	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	3	6	24	2
67-01-45	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	3	5	20	12
67-01-56	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	6
Total N and ppm P															34	136	43
31-01-01	Potatoes	400 cwt/ac	Wheat	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	18	2	20	80	20
31-01-12	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	7	2	9	36	10
31-01-23	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	5	2	7	28	2
31-01-34	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	7	2	9	36	3
31-01-45	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	10	2	12	48	2
31-01-56	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	3	3	6	24	8
Total N and ppm P															63	252	45
31-02-01	Potatoes	400 cwt/ac	Wheat	Y 1/yr	3	1.4	Y	N	N	WL	N	Y	20	3	23	92	26
31-02-12	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	13	3	16	64	11
31-02-23	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	16	3	19	76	7
31-02-34	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	10	2	12	48	11
31-02-45	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	6	2	8	32	7
31-02-56	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	3	2	5	20	2
Total N and ppm P															83	332	64
31-03-01	Corn	30 t/ac	Beets	Y 1/yr	4	1.6	N	N	N	Pivot	N	Y	8	2	10	40	9
31-03-12	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	8	1	9	36	12
31-03-23	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	2	4	16	4
31-03-34	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	3	2	5	20	3
31-03-45	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	4	2	6	24	2
31-03-56	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	2	4	16	4
Total N and ppm P															38	152	34
31-17-01	Beans	30 cwt/ac	Beets	Y triennial	3	1.4	Y	N	N	WL	ET	N	7	2	9	36	40
31-17-12	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	5	2	7	28	26
31-17-23	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	7	2	9	36	26
31-17-34	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	6	2	8	32	38
31-17-45	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	9
31-17-56	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	4	1	5	20	2
Total N and ppm P															103	412	141
31-18-01	Beets	40 t/ac	Wheat	Y triennial	3	1.3	Y	N	N	WL	ET	N	4	2	6	24	6
31-18-12	Beets	40 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	8
31-18-23	Beets	40 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	4	1	5	20	17
31-18-34	Beets	40 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	2	4	16	3
31-18-45	Beets	40 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	7
31-18-56	Beets	40 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	3
Total N and ppm P															24	96	44
31-19-01	Beans	27 cwt/ac	Beets	Y triennial	4	1.5	Y	N	N	WL	ET	N	17	6	23	92	11
31-19-12	Beans	27 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	4	3	7	28	5
31-19-23	Beans	27 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	4	1	5	20	4
31-19-34	Beans	27 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	1	3	18	7
31-19-45	Beans	27 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	3
31-19-56	Beans	27 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	2	4	16	14
Total N and ppm P															45	180	44

TABLE 2

2017 Fall PHDSS
Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
31-20-01	Beets	42 t/ac	Wheat	Y triennial	3	1.4	Y	N	N	WL	ET	N	6	2	8	32	14
31-20-12	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	28	7	35	140	12
31-20-23	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
31-20-34	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	4	3	7	28	5
31-20-45	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	10	4	14	56	5
31-20-56	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	5	2	7	28	2
Total N and ppm P															74	296	40
31-21-01	Beets	33 t/ac	Wheat	Y triennial	3	1.5	Y	N	N	WL	ET	N	5	2	7	28	10
31-21-12	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	5	2	7	28	11
31-21-23	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	19	7	26	104	6
31-21-34	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	3	1	4	16	2
31-21-45	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	3	1	4	16	3
31-21-56	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	5
Total N and ppm P															51	204	37
67-24-01	Beans	30 cwt/ac	Beets	Y triennial	3	1.6	Y	N	N	WL	ET	N	28	7	35	140	5
67-24-12	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	10	3	13	52	10
67-24-23	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
67-24-34	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	30	9	39	156	13
67-24-45	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	29	8	37	148	7
67-24-56	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	8	3	11	44	3
Total N and ppm P															138	552	40
67-25-01	Wheat	119 bu/ac	Wheat	Y triennial	4	1.5	Y	N	N	WL	ET	N	29	8	37	148	11
67-25-12	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	6	2	8	32	17
67-25-23	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	5
67-25-34	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	18	5	13	52	2
67-25-45	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	3
67-25-56	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	2	4	16	8
Total N and ppm P															68	272	46
83-22-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.3	N	Y	N	WL	N	Y	17	6	23	92	38
83-22-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	27	9	36	144	4
83-22-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	2	1	3	12	2
83-22-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	5
83-22-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	2	2	4	16	21
83-22-56	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	5	2	7	28	11
Total N and ppm P															78	312	81
67-26-01	Beets	36 t/ac	Wheat	Y triennial	4	1.4	Y	N	N	WL	ET	N	6	2	8	32	11
67-26-12	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	25	6	31	124	2
67-26-23	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	3	1	4	16	2
67-26-34	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
67-26-45	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	4
67-26-56	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	25	8	33	132	2
Total N and ppm P															82	328	23
67-27-01	Potatoes	550 cwt/ac	Barley	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	17	5	22	44	33
67-27-12	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	10	4	14	56	17
67-27-23	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	7	3	10	40	3
67-27-34	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	7	3	10	40	6
67-27-45	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	6
67-27-56	Potatoes	550 cwt/ac	Barley	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	4
Total N and ppm P															62	204	69

TABLE 2

2017 Fall PHDSS

Cassia, Minidoka, Twin Falls Nitrate Priority Areas

				Soil Sample			Fertilizer	Manure	Both	Irr. Sys.	Moisture	Standard			Total		
Field ID	Crop	Yield	Past Crop	Y/N	Texture	%OM	Y/N	Y/N	Y/N	Sur./Spk.	Sensor Y/N	Schedule	NO3	NH4	ppm	Lbs. N	ppm P
83-27-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.3	Y	N	N	Pivot	N	Y	35	10	45	180	48
83-27-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	65	11	76	304	10
83-27-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	39	8	47	188	2
83-27-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	18	6	24	96	7
83-27-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	18	5	23	92	20
83-27-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	8	3	11	44	30
Total N and ppm P															226	904	117
83-34-01					5	1.2							17	6	2	8	23
83-34-12													3	2	5	20	3
83-34-23													2	1	3	12	2
83-34-34													6	2	8	32	11
83-34-45													3	2	5	20	23
Total N and ppm P															23	92	63
83-35-01					4	1.2							31	9	40	160	5
83-35-12													13	5	18	72	3
83-35-23													5	2	7	28	3
83-35-34													4	1	5	20	3
83-35-45													4	3	7	28	3
83-35-56													5	2	7	28	5
Total N and ppm P															84	336	22
83-36-01					5	1.3							14	5	19	76	20
83-36-12													21	7	28	112	2
83-36-23													7	2	9	36	5
83-36-34													2	1	3	12	6
83-36-45													2	2	4	16	5
83-36-56													2	1	3	12	8
Total N and ppm P															66	264	46
83-37-01					5	1.2							27	9	36	16	42
83-37-12													2	2	4	12	6
83-37-23													2	1	3	128	2
83-37-34													24	8	32	12	13
83-37-45													2	1	3	16	4
83-37-56													2	2	4	4	9
Total N and ppm P															82	328	193
83-38-01					5	1.1							5	2	7	28	4
83-38-12													2	2	4	16	2
83-38-23													2	1	3	12	9
83-38-34													4	3	7	28	22
83-38-45													2	2	4	16	20
83-38-56													2	1	3	12	36
Total N and ppm P															28	112	93
83-39-01	Alfalfa	8 t/ac	Alfalfa	Y biennial	4	1.2	N	N	N	Pivot	N	Y	16	6	22	88	11
83-39-12	Alfalfa	8 t/ac	Alfalfa	Y biennial			N	N	N	Pivot	N	Y	25	9	33	132	14
83-39-23	Alfalfa	8 t/ac	Alfalfa	Y biennial			N	N	N	Pivot	N	Y	21	7	28	112	8
Total N and ppm P															83	332	33
83-40-01	Wheat	155 bu/ac	Corn	Y biennial	4	1.2	Y	N	N	Pivot	N	Y	3	2	5	20	5
83-40-12	Wheat	155 bu/ac	Corn	Y biennial			Y	N	N	Pivot	N	Y	2	1	3	12	5
83-40-23	Wheat	155 bu/ac	Corn	Y biennial			Y	N	N	Pivot	N	Y	2	2	4	16	47
Total N and ppm P															12	48	57
83-41-01	Pasture		Pasture	Y 1 in 4 yrs	4	1.3	N	N	N	Pivot	N	Y	7	3	10	40	10
83-41-12	Pasture		Pasture	Y 1 in 4 yrs			N	N	N	Pivot	N	Y	4	2	6	24	11
83-41-23	Pasture		Pasture	Y 1 in 4 yrs			N	N	N	Pivot	N	Y	3	2	5	20	9
83-41-34	Pasture		Pasture	Y 1 in 4 yrs			N	N	N	Pivot	N	Y	2	1	3	12	9
Total N and ppm P															24	96	39

TABLE 3

2017 Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co.
Fields sampled both spring and fall 2017

Sample date	Field ID	Crop	Yield	Past Crop	Y/N Soil Sample	Texture	%OM	Y/N Fertilizer	Y/N Manure	Y/N Both	Irr. Sys Sur./spk	Moisture Sen. Y/N	Y/N Std.	NO3	NH4	Total ppm	Total Lbs. N	ppm P
SP 17	31-03-0-1	Corn	30 t/ac	Beets	Y 1/yr	4	1.5	N	N	N	Pivot	N	Y	57	5	62	248	25
SP 17	31-03-1-2	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	8	4	12	48	8
SP 17	31-03-2-3	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	3	5	20	3
SP 17	Total N; ppm P															79	316	36
Fall 17	31-03-01	Corn	30 t/ac	Beets	Y 1/yr	4	1.6	N	N	N	Pivot	N	Y	8	2	10	40	9
Fall 17	31-03-12	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	8	1	9	36	12
Fall 17	31-03-23	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	2	4	16	4
Fall 17	31-03-34	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	3	2	5	20	3
Fall 17	31-03-45	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	4	2	6	24	2
Fall 17	31-03-56	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	2	2	4	16	4
Fall 17	Total N ; ppm P															38	152	34
SP 17 *	67-15-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.4	Y	N	N	WL	N	Y	3	1	4	16	18
SP 17	67-15-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
SP 17	67-15-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	5
SP 17	67-15-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	7
SP 17	67-15-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	8
SP 17	67-15-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	6
SP 17	Total N; ppm P															19	76	47
Fall 17 *	67-05-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.5	Y	N	N	WL	N	Y	2	3	5	20	10
Fall 17	67-05-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	16
Fall 17	67-05-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	11
Fall 17	67-05-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	9
Fall 17	67-05-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	5
Fall 17	67-05-56	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
Fall 17	Total N; ppm P															21	84	54
SP 17	67-06-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	4	1	5	20	13
SP 17	67-06-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	7
SP 17	67-06-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
SP 17	67-06-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
SP 17	67-06-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	4
SP 17	67-06-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
SP 17	Total N; ppm P															20	80	33

TABLE 3

2017 Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co.
Fields sampled both spring and fall 2017

Sample date	Field ID	Crop	Yield	Past Crop	Y/N Soil Sample	Texture	%OM	Y/N Fertilizer	Y/N Manure	Y/N Both	Irr. Sys Sur./spk	Moisture Sen. Y/N	Y/N Std.	NO3	NH4	Total ppm	Total Lbs. N	ppm P
Fall 17	67-06-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	3	1.6	Y	N	N	WL	N	Y	2	1	3	12	12
Fall 17	67-06-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	3	1	4	16	17
Fall 17	67-06-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	19	6	25	100	3
Fall 17	67-06-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	1	3	12	3
Fall 17	67-06-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	2	2	4	16	3
Fall 17	67-06-56	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			Y	N	N	WL	N	Y	22	2	24	96	4
Fall 17	Total N; ppm P															63	252	42
SP 17	83-22-0-1	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.4	N	Y	N	WL	N	Y	6	3	9	36	42
SP 17	83-22-1-2	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	4	16	8
SP 17	83-22-2-3	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	3
SP 17	83-22-3-4	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	13
SP 17	83-22-4-5	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	3	6	24	11
SP 17	Total N; ppm P															29	116	77
Fall 17	83-22-01	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.3	N	Y	N	WL	N	Y	17	6	23	92	38
Fall 17	83-22-12	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	27	9	36	144	4
Fall 17	83-22-23	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	2	1	3	12	2
Fall 17	83-22-34	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	3	2	5	20	5
Fall 17	83-22-45	Alfalfa	8 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	2	2	4	16	21
Fall 17	83-22-56	Alfalfa	9 t/ac	Alfalfa	Y 1/yr			N	Y	N	WL	N	Y	5	2	7	28	11
Fall 17	Total N; ppm P															78	312	81
SP 17	67-01-0-1	Beans	31 cwt/ac	M Barley	Y 1/yr	3	1.4	Y	N	N	Pivot	ET	N	9	2	11	44	15
SP 17	67-01-1-2	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	9	36	16
SP 17	67-01-2-3	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	6	9	36	5
SP 17	67-01-3-4	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	6
SP 17	67-01-4-5	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	5	20	5
SP 17	67-01-5-6	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	3	5	20	9
SP 17	Total N; ppm P															43	172	56
Fall 17	67-01-01	Beans	31 cwt/ac	M Barley	Y 1/yr	3	1.4	Y	N	N	Pivot	ET	N	8	2	10	40	10
Fall 17	67-01-12	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	2	5	20	4
Fall 17	67-01-23	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	9
Fall 17	67-01-34	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	3	6	24	2
Fall 17	67-01-45	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	3	5	20	12
Fall 17	67-01-56	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	2	2	4	16	6
Fall 17	Total N; ppm P															34	136	43

TABLE 3

2017 Post Harvest Deep Soil Samples
Cassia/Minidoka/Twin Falls Co.
Fields sampled both spring and fall 2017

Sample date	Field ID	Crop	Yield	Past Crop	Y/N Soil Sample	Texture	%OM	Y/N Fertilizer	Y/N Manure	Y/N Both	Irr. Sys Sur./spk	Moisture Sen. Y/N	Y/N Std.	NO3	NH4	Total ppm	Total Lbs. N	ppm P
Fall 16 **	31-2648-1-1	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	Pivot	Y	N	2	3	5	20	20
Fall 16	31-2648-1-2	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	19
Fall 16	31-2648-1-3	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	11
Fall 16	31-2648-1-4	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	3	5	20	6
Fall 16	31-2648-1-5	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	6	8	32	12
Fall 16	31-2648-1-6	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	4	3	7	28	8
Fall 16	Total N; ppm P															35	140	76
SP 17 **	31-01-01	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.5	Y	N	N	Pivot	Y	N	7	2	9	36	21
SP 17	31-01-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	3	1	4	16	8
SP 17	31-01-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	9
SP 17	31-01-34	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	11
SP 17	31-01-45	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	7
SP 17	31-01-56	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	Y	N	2	1	3	12	3
SP 17	Total N; ppm P															25	100	59
SP 17 ***	31-06-0-1	Beans	24 cwt/ac	Beans	Y 1/yr	3	1.1	Y	N	N	Pivot	Y	N	15	4	19	76	24
SP 17	31-06-1-2	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	10	3	13	52	5
SP 17	31-06-2-3	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	5	2	7	28	3
SP 17	31-06-3-4	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	7	3	10	40	13
SP 17	31-06-4-5	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	4	5	9	36	7
SP 17	31-06-5-6	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	8
SP 17	Total N; ppm P															64	256	60
Fall 16 ***	31-2648-3-1	Beans	24 cwt/ac	Beans	Y 1/yr	3	1.4	Y	N	N	Pivot	Y	N	9	3	12	48	15
Fall 16	31-2648-3-2	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	7	3	10	40	7
Fall 16	31-2648-3-3	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	6	3	9	36	4
Fall 16	31-2648-3-4	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	6	3	9	36	5
Fall 16	31-2648-3-5	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	7
Fall 16	31-2648-3-6	Beans	24 cwt/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	6	24	9
Fall 16	Total N; ppm P															52	208	47

* 67-05 & 67-15 are the same fields.
** 31-01 & 31-2648-1 are the same fields
*** 31-06 & 31-2648-3 are the same fields

TABLE 4: Summary Table Showing Ranges of Nitrogen and Phosphorous for Spring Sampling

Highest and lowest by individual ft.

SPRING 17									
Highest/Lowest	Crop	Lbs N	ppm P	Irrigation Type	sample depth	Fert	Manure	Both	
Highest N	Corn	248	25	Pivot	0-1 ft.	N	N	N	31-03
Lowest N	Barley	12	3	Pivot	4-5 ft.	Y	N	N	83-16
Highest P	Corn	104	77	Surface	0-1 ft.	Y	Y	Y	83-01
Lowest P	Corn	100	1	Pivot	1-2 ft.	N	Y	N	83-17

Highest and lowest by all sample depths

SPRING 17									
Highest/Lowest	Crop	Lbs N	ppm P	Irrigation Type	sample depth	Fert	Manure	Both	
Highest N	Corn	540	16	Pivot	all	Y	N	N	83-17
	Beans	584	61	Pivot	all	N	Y	N	31-05
Lowest N	Alfalfa	76	47	WL	all	Y	N	N	67-15
	Alfalfa	80	33	WL	all	Y	N	N	67-06
Highest P	Beans	156	142	Pivot	all	Y	Y	Y	83-05
	Corn	456	142	Surface	all	Y	Y	Y	83-01
Lowest P	Corn	540	16	Pivot	all	N	Y	N	83-17

By individual Ft.

Sp_17	Field ID	Crop	Yield	Past Crop	Soil Sample Y/N	Texture	%OM	Fertilizer Y/N	Manure Y/N	Both Y/N	Irr. Sys Sur./spk	Moisture Sen. Y/N	Std. Sched. Y/N	NO3	NH4	Total ppm	Total Lbs. N	ppm P
	Highest N																	
	83-17-1-:	Corn	.00 bu/a	Corn	Y 1/yr			N	Y	N	Pivot	N	Y	22	3	25	100	1
	Lowest N																	
	83-16-45	Barley	.04 bu/a	Barley	Y			Y	N	N	Pivot	ET	N	2	1	3	12	3
	Highest P																	
	83-01-1	Corn	.17 bu/a	Alfalfa	Y triennia	5	1.6	Y	Y	Y	surface	N	Y	24	2	26	104	77
	Lowest P																	
	31-03-0-:	Corn	30 t/ac	Beets	Y 1/yr	4	1.5	N	N	N	Pivot	N	Y	57	5	62	248	25

By Field total

Sp_17	Field ID	Crop	Yield	Past Crop	Soil Sample	Texture	%OM	Fertilizer	Manure	Both	Sur./Spk.	Moist. Sensor	std. Schedule	Total NO3	Total NH4	ppm	Lbs. N	P
	Highest N																	
Sp_17	83-17	Corn	.00 bu/a	Corn	Y 1/yr	4	1.4	N	Y	N	Pivot	N	Y	117	18	135	540	16
Sp_17	31-05	Beans	:0 cwt/a	Alfalfa	Y 1/yr	3	1.3	Y	N	N	Pivot	Y	N	49	12	146	584	61
	Lowest N																	
Sp_17	67-15	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.4	Y	N	N	WL	N	Y	13	6	19	76	47
Sp_17	67-06	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	3	1.3	Y	N	N	WL	N	Y	14	6	20	80	33
	Highest P																	
Sp_17	83-05	Corn	.17 bu/a	Alfalfa	Y triennia	5	1.6	Y	Y	Y	surface	N	Y	33	6	39	156	142
Sp_17	83-01	Beans	:0 cwt/a	Corn	Y 1/yr	4	1.5	Y	Y	Y	Pivot	N	Y	109	5	114	456	142
	Lowest P																	
Sp_17	83-17	Corn	.00 bu/a	Corn	Y 1/yr	4	1.4	N	Y	N	Pivot	N	Y	117	18	135	540	16

TABLE 5: Summary Table Showing Ranges of Nitrogen and Phosphorous for Fall Sampling

Highest and lowest by individual ft.

Fall 17									
Highest/Lowest	Crop	Lbs: N	ppm: P	Irrigation Type	sample depth	Fert	Manure	Both	
Highest N	Alfalfa	304	10	Pivot	1-2 ft.	Y	N	N	83-27
Lowest N	Potatoes	4	9	HL	2-3 ft.	Y	Y	Y	31-14
Highest P	Barley	160	54	Pivot	0-1 ft.	Y	N	N	83-24
Lowest P *	*	12	2	*	*	*	*	*	See below

* 36 fields tested with the low P value of 2 with N Range from 12 lbs. to 188 lbs.
Fertilizer 33 Y & 3 N, Manure 13 Y & 23 N, Both 7 Y & 29 N.

Highest and lowest by all sample depths

Fall 17									
Highest/Lowest	Crop	Lbs: N	ppm: P	Irrigation Type	sample depth	Fert	Manure	Both	
Highest N	Alfalfa	904	117	Pivot	all	Y	N	N	83-27
Lowest N*	Alfalfa	84	54	WL	all	Y	N	N	67-05
Highest P	NR	328	193	NR	NR	NR	NR	NR	83-37
	Beans	412	141	WL	all	Y	N	N	31-17
Lowest P**	Alfalfa	112	16	WL	all	N	N	N	31-12

*Lowest level for 6 ft. sample depth
**Lowest level for 6 ft. sample depth

TABLE 5: Summary Table Showing Ranges of Nitrogen and Phosphorous for Fall Sampling

By individual Ft.

Fall 17	Field ID	Crop	Yield	Past Crop	Soil Sample	Texture	%OM	Fertilizer	Manure	Both	Sur./Spk.	Moist. Sensor	std. Schedule	NO3	NH4	Total N ppm	Lbs. N	ppm P
	Highest N																	
	83-27-12	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	65	11	76	304	10
	Lowest N																	
	31-14-23	Potatoes	500 cwt/ac	Barley	Y 1/yr			Y	Y	Y	HL	Y	N	2	1	3	12	7
	Highest P																	
	83-24-01	Barley	140 bu/ac	Potatoes	Y	4	1.2	Y	N	N	Pivot	Y	N	35	3	40	160	54
	Lowest P	(Mulitple fields below)																
	31-07-34	Alfalfa	5 t/ac	Alfalfa	Y			Y	N	N	Surface	N	Y	2	1	3	12	2
	31-08-45	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	5	3	8	32	2
	31-08-56	Corn	33 t/ac	Corn	Y			Y	Y	Y	Surface	N	Y	6	3	9	36	2
	31-09-45	Barley	130 bu/ac	Corn	Y			Y	Y	Y	Surface	N	Y	11	4	15	60	2
	31-10-34	Barley	130 bu/ac	Beets	Y			Y	Y	Y	Surface	N	Y	8	4	12	48	2
	31-11-45	Beets	41 t/ac	Barley	Y			Y	N	N	WL	N	Y	2	2	4	16	2
	31-12-12	Alfalfa	6.5 t/ac	Alfalfa	Y	5	1.6	N	N	N	WL	N	Y	5	4	9	36	2
	83-30-01	Peas	25 cwt/ac	fallow	Y	3	1.4	Y	Y	Y	Pivot	N	N	3	4	7	28	2
	83-30-12	Peas	25 cwt/ac	fallow	Y			Y	Y	Y	Pivot	N	N	8	3	11	44	2
	83-29-12	Wheat	125 bu/ac	Wheat	Y			Y	Y	Y	Pivot	N	N	7	3	10	40	2
	83-24-45	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	7	3	10	40	2
	83-24-56	Barley	140 bu/ac	Potatoes	Y			Y	N	N	Pivot	Y	N	7	2	9	36	2
	83-25-23	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	9	36	2
	83-25-34	M Barley	140 bu/ac	Beans	Y 1/yr			Y	N	N	Pivot	Y	N	3	3	9	36	2
	67-16-12	Wheat	120 bu/ac	Beans	Y 1/yr			N	Y	N	WL	N	Y	15	3	18	72	2
	67-01-34	Beans	31 cwt/ac	M Barley	Y 1/yr			Y	N	N	Pivot	ET	N	3	3	6	24	2
	31-01-23	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	5	2	7	28	2
	31-01-45	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	10	2	12	48	2
	31-02-56	Potatoes	400 cwt/ac	Wheat	Y 1/yr			Y	N	N	WL	N	Y	3	2	5	20	2
	31-03-45	Corn	30 t/ac	Beets	Y 1/yr			N	N	N	Pivot	N	Y	4	2	6	24	2
	31-17-56	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	4	1	5	20	2
	31-20-23	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
	31-20-56	Beets	42 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	5	2	7	28	2
	31-21-34	Beets	33 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	3	1	4	16	2
	67-24-23	Beans	30 cwt/ac	Beets	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
	67-25-34	Wheat	119 bu/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	18	5	13	52	2
	83-22-23													2	1	3	12	2
	67-26-12	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	25	6	31	124	2
	67-26-23	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	3	1	4	16	2
	67-26-34	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	2	1	3	12	2
	67-26-56	Beets	36 t/ac	Wheat	Y triennial			Y	N	N	WL	ET	N	25	8	33	132	2
	83-27-23	Alfalfa	7 t/ac	Alfalfa	Y 1/yr			Y	N	N	Pivot	N	Y	39	8	47	188	2

By Field total

Fall 17	Field ID	Crop	Yield	Past Crop	Soil Sample	Texture	%OM	Fertilizer	Manure	Both	Sur./Spk.	Moist. Sensor	std. Schedule	Total NO3	Total NH4	Total N ppm	Lbs. N	ppm P
	Highest N																	
Fall 17	83-27	Alfalfa	7 t/ac	Alfalfa	Y 1/yr	4	1.3	Y	N	N	Pivot	N	Y	183	43	226	904	117
	Lowest N																	
Fall 17	67-05	Alfalfa	8 t/ac	Alfalfa	Y 1/yr	4	1.5	Y	N	N	WL	N	Y	12	9	21	84	54
	Highest P																	
Fall 17	83-37	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	59	23	82	328	193
Fall 17	31-17	Beans	30 cwt/ac	Beets	Y triennial	3	1.4	Y	N	N	WL	ET	N	31	10	103	412	141
	Lowest P																	
Fall 17	31-12-12	Alfalfa	6.5 t/ac	Alfalfa	Y	5	1.6	N	N	N	WL	N	Y	17	11	28	112	16

TABLE 6

WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS

Date:	01/27/17																					
Lab #	Field ID	Depth	Blind/Dup	pH	Salts	Texture	Na	CEC	Lime	%OM	NO3	NH4	P	K	Ca	Mg	S	Zn	Fe	Mn	Cu	B
93613	31-2648-1-1	1		7.1	0.34	3	84	10	3.9	1.3	2	3	20	187	4340	431	16	1.4	2	5	0.4	0.3
93614	31-2648-1-2	2		7.4	0.28						2	3	19									
93615	31-2648-1-3	3		7.5	0.26						2	3	11									
93616	31-2648-1-4	4		7.5	0.33						2	3	6									
93617	31-2648-1-5	5		7.4	0.33						2	6	12									
93618	31-2648-1-6	6		7.3	0.71						4	3	8									
93619	31-2648-3-1	1		7.5	0.22	3	114	11	3.6	1.4	9	3	15	161	4004	388	19	1.3	5	4	0.3	0.2
93620	31-2648-3-2	2		7.5	0.33						7	3	7									
93621	31-2648-3-3	3		7.6	0.34						6	3	4									
93622	31-2648-3-4	4		7.7	0.27						6	3	5									
93623	31-2648-3-5	5		7.7	0.23						3	3	7									
93624	31-2648-3-6	6		7.6	0.27						3	3	9									
Date:	04/26/17																					
Lab #	Field ID	Grid		pH	Salts	Texture	Na	CEC	Lime	%OM	NO3	NH4	P	K	Ca	Mg	S	Zn	Fe	Mn	Cu	B
95228	83-01-1	1		8.1	0.3	5	59	18	2.9	1.6	24	2	77	271	3224	405	14	2.2	14	3	1.5	0.2
95229	83-01-2	2							0		33		17									
95230	83-01-3	3							0		29		14									
95231	83-01-4	4							0		23		34									
95232	83-02-1	1		7.9	0.3	5	63	20	3	1.7	19	3	38	252	3292	406	15	1.6	16	6	1.1	0.4
95233	83-02-2	2							0		46		15									
95234	83-03-1	1		8.2	0.27	5	58	19	2.9	1.36	13	1	24	178	3235	383	17	1.3	12	4	1.6	0.3
95235	83-03-2	2							0		16		22									
95236	83-04-1	1		8.3	0.32	4	78	18	4.2	1.4	12	5	13	309	3102	401	20	2.4	10	6	1	0.7
95237	83-04-2	2							0		29		55									
95238	83-04-3	3							0		30		26									
95239	83-05-1	1		8.4	0.17	4	60	16	4.1	1.5	10	3	31	235	3068	387	16	2.6	10	5	1.4	0.3
95240	83-05-2	2							0		12		13									
95241	83-05-3	3							0		5		13									
95242	83-05-4	4							0		6		12									
95243	83-06-1	1		8.3	0.24	4	59	18	4.2	1.6	8	1	24	234	3084	395	14	2.2	11	4	1.3	0.6
95244	83-06-2	2							0		15		10									
95245	83-06-3	3							0		6		11									
95246	83-08-1	1		8.4	0.3	4	61	18	4.1	1.4	16	1	60	275	3003	391	17	1.6	11	6	1.9	0.7
95247	83-08-2	2							0		14		16									
95248	83-07-1	1		8.4	0.22	5	52	20	4.3	1.6	7	1	29	191	3187	405	14	1	8	2	0.7	0.2
95249	83-07-2	2							0		14		9									
95250	83-07-3	3							0		20		11									
95251	83-07-4	4							0		18		10									
95252	83-07-5	5							0		10		15									
95253	83-07-6	6							0		13		10									
95254	83-09-1	1		8.3	0.29	5	44	19	4.3	1.4	14	2	38	278	3189	402	14	2	7	6	0.8	0.2
95255	83-09-2	2							0		27		15									
95256	83-09-3	3							0		17		10									
95257	83-09-4	4							0		7		13									

TABLE 6									**WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS**												
Date:	**01/27/17**																				
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
Date:	**05/04/17**																				
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
95461	83-10-01	1		8.2	0.25	3	114	10	4.5	1.4	7	3	6	122	4998	303	22	1.1	4	2	0.7	0.3
95462	83-10-12	2							0		7	2	5									
95463	83-10-23	3							0		6	1	4									
95464	83-10-34	4							0		8	2	13									
95465	83-10-45	5							0		5	2	3									
95466	83-10-56	6							0		8	3	4									
95467	83-11-01	1		8	0.31	3	110	9	3.8	1.5	20	3	33	225	4267	294	21	1.7	4	2	0.5	0.3
95468	83-11-12	2							0		8	3	4									
95469	83-11-23	3							0		8	2	4									
95470	83-12-01	1		8	0.36	4	100	17	3.7	1.6	19	2	47	374	4072	383	21	2.3	5	3	0.5	0.3
95471	83-12-12	2							0		10	1	3									
95472	83-12-23	3							0		4	1	3									
95473	83-12-34	4							0		6	2	4									
95474	83-12-45	5							0		4	1	3									
95475	83-12-56	6							0		8	1	3									
95476	83-13-01	1		8.1	0.29	4	75	15	3.9	1.4	15	2	15	360	4353	423	22	1.1	4	3	0.4	0.3
95477	83-13-12	2							0		7	2	6									
95478	83-13-23	3							0		7	3	3									
95479	83-13-34	4							0		8	4	7									
95480	83-13-45	5							0		6	1	3									
95481	83-13-56	6							0		9	2	10									
95482	83-14-01	1		8.3	0.3	4	112	16	5.8	1.3	13	1	13	205	4280	451	23	1.8	3	2	0.4	0.3
95483	83-14-12	2							0		5	1	4									
95484	83-14-23	3							0		6	2	3									
95485	83-14-34	4							0		6	2	10									
95486	83-14-45	5							0		4	2	8									
95487	83-14-56	6							0		6	1	17									
95488	83-15-01	1		8.3	0.29		78		5.9		19	2	16	276	4406	395	24	1.2	2	2	0.4	0.4
95489	83-15-12	2							0		9	1	4									
95490	83-15-23	3							0		7	1	5									
95491	83-15-34	4							0		16	5	3									
95492	83-15-45	5							0		3	1	4									
95493	83-15-56	6							0		3	3	14									
95494	83-16-01	1		8.4	0.26		59		6.2		9	1	6	157	4566	335	21	0.7	2	3	0.4	0.4
95495	83-16-12	2							0		7	6	3									
95496	83-16-23	3							0		6	1	3									
95497	83-16-34	4							0		8	4	4									
95498	83-16-45	5							0		2	1	3									
95499	83-16-56	6							0		8	1	8									
95500	83-33-12	1	Blind						0		11	2	3									
95501	83-32-01	1	Dup 83-11-01	8	0.3	4	142	16	4.9	1.4	21	2	37	325	5416	339	26	2.1	4	3	0.6	0.3
95502	83-32-12	2	Dup 83-11-12						0		8	1	6									
95503	83-32-23	3	Dup 83-11-23						0		34	2	5									
95504	83-31-01	1	Dup 83-10-01	8.2	0.24		110		4.5		8	2	8	123	4962	310	23	0.8	3	2	0.5	0.4
95505	83-31-12	2	Dup 83-10-12						0		8	3	4									
95506	83-31-23	3	Dup 83-10-23						0		6	1	12									
95507	83-31-34	4	Dup 83-10-34						0		5	1	13									
95508	83-31-45	5	Dup 83-10-45						0		4	1	3									
95509	83-31-56	6	Dup 83-10-56						0		7	6	3									

TABLE 6									**WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS**												
Date:	**01/27/17**																				
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
Date:	**05/31/17**																				
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
95914	31-05-0-1	1		8.1	0.25	3	106	9	4.5	1.3	15	4	12	166	4945	409	25	1.6	5	2	0.5	0.4
95915	31-05-1-2	2							0		14	2	9									
95916	31-05-2-3	3							0		10	2	7									
95917	31-05-3-4	4							0		8	2	11									
95918	31-05-4-5	5							0		2	2	8									
95919	31-05-5-6	6							0		2	2	14									
95920	31-06-0-1	1		8.3	0.25	3	118	10	6.5	1.1	15	4	24	140	4804	382	28	1.2	2	3	0.6	0.3
95921	31-06-1-2	2							0		10	3	5									
95922	31-06-2-3	3							0		5	2	3									
95923	31-06-3-4	4							0		7	3	13									
95924	31-06-4-5	5							0		4	5	7									
95925	31-06-5-6	6							0		3	3	8									
95926	67-01-0-1	1		8.7	0.25	3	209	9	6.4	1.4	9	2	15	110	4720	490	25	0.4	2	3	0.4	0.5
95927	67-01-1-2	1							0		3	2	16									
95928	67-01-2-3	3							0		3	6	5									
95929	67-01-3-4	4							0		2	2	6									
95930	67-01-4-5	5							0		3	2	5									
95931	67-01-5-6	6							0		2	3	9									
95932	83-17-0-1	1		8.3	0.25	4	69	17	6.9	1.4	21	4	8	205	5108	299	26	0.8	2	2	0.5	0.3
95933	83-17-1-2	2							0		22	3	1									
95934	83-17-2-3	3							0		37	5	3									
95935	83-17-3-4	4							0		37	6	4									
95936	83-14-4-5	5							0		46	6	7									
95937	83-14-5-6	6							0		47	5	16									
95938	83-19-0-1	1		8.3	0.22	3	73	10	6.4	1.3	19	2	12	250	4763	287	23	0.6	2	3	0.4	0.3
95939	83-19-1-2	2							0		18	2	12									
95940	83-19-2-3	3							0		14	2	4									
95941	83-19-3-4	4							0		19	3	5									
95942	83-19-4-5	5							0		18	2	4									
95943	83-19-5-6	6							0		11	3	5									
95944	83-20-01	1		8.4	0.25	3	51	10	6.8	1.4	22	4	11	113	5037	341	25	0.4	3	3	0.6	0.2
95945	83-20-1-2	2							0		17	4	8									
95946	83-20-2-3	3							0		8	3	5									
95947	83-20-3-4	4							0		9	4	8									
95948	83-20-4-5	5							0		5	2	6									
95949	83-20-5-6	6							0		4	1	13									
95950	83-18-0-1	1		8.5	0.23	3	56	10	7.1	1.3	7	3	7	138	5276	344	24	0.6	2	2	0.5	0.2
95951	83-18-1-2	2							0		5	4	4									
95952	83-18-2-3	3							0		2	3	5									
95953	83-18-3-4	4							0		2	2	7									
95954	83-18-4-5	5							0		3	3	6									
95955	83-18-5-6	6							0		3	3	4									
95956	83-21-0-1	1		8.4	0.16	4	89	14	6.3	1.3	6	3	24	81	4696	425	24	2	6	2	0.8	0.4
95957	83-21-1-2	2							0		2	4	18									
95958	83-21-2-3	3							0		2	4	10									
95959	83-22-0-1	1		8.2	0.16	4	65	12	4.5	1.4	6	3	42	112	5030	351	24	1.2	4	2	0.6	0.2
95960	83-22-1-2	2							0		3	2	8									
95961	83-22-2-3	3							0		3	2	3									
95962	83-22-3-4	4							0		3	2	13									
95963	83-22-4-5	5							0		3	3	11									
95964	31-03-0-1	1		8	0.28	4	156	10	3.8	1.5	57	5	25	157	4184	277	23	1.1	3	2	0.3	0.3
95965	31-03-1-2	2							0		8	4	8									
95966	31-03-2-3	3							0		2	3	3									

TABLE 6

									WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS													
Date:	**01/27/17**																					
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
Date:	**06/14/17**																					
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
95967	67-03-01	1		8.1	0.15	3	42	10	3.4	1.4	10	3	18	104	3791	247	20	1.8	3	2	0.3	0.3
95968	67-03-12	2							0		3	1	9									
95969	67-03-23	3							0		2	1	12									
95970	67-03-34	4							0		2	1	3									
95971	67-03-45	5							0		3	1	4									
95972	67-03-56	6							0		5	2	4									
95973	67-15-01	1		8.3	0.18	4	65	14	6.4	1.4	3	1	18	123	4716	488	23	1.8	3	3	0.6	0.4
95974	67-15-12	2							0		2	1	3									
95975	67-15-23	3							0		2	1	5									
95976	67-15-34	4							0		2	1	7									
95977	67-15-45	5							0		2	1	8									
95978	67-15-56	6							0		2	1	6									
95979	67-06-01	1		7.8	0.22	3	45	9	3.4	1.3	4	1	13	171	3733	385	18	1	6	3	0.7	0.4
95980	67-06-12	2							0		2	1	7									
95981	67-06-23	3							0		2	1	3									
95982	67-06-34	4							0		2	1	3									
95983	67-06-45	5							0		2	1	4									
95984	67-06-56	6							0		2	1	3									
95985	31-01-01	1		8.1	0.21	3	55	9	4	1.5	7	2	21	233	4498	445	22	1.9	4	2	0.5	0.5
95986	31.01-12	2							0		3	1	8									
95987	31-01-23	3							0		2	1	9									
95988	31-01-34	4							0		2	1	11									
95989	31-01-45	5							0		2	1	7									
95990	31-01-56	6							0		2	1	3									
Date:	**10/26/17**																					
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
103344	83-30-01	1		7.8	0.44	3	166	10	2.2	1.4	3	4	2	514	2468	305	40	1	4	2	0.3	1
103345	83-30-12	2							0		8	3	2									
103346	83-30-23	3							0		8	3	3									
103347	83-29-01	4		7.8	0.34	4	65	14	4	1.3	4	3	6	269	4440	392	20	0.4	3	2	1.2	0.7
103348	83-29-12	5							0		7	3	2									
103349	83-29-23	6							0		9	3	10									
103350	83-29-34	7							0		6	2	16									
103351	83-29-45	8							0		8	2	11									
103352	83-29-56	9							0		5	3	13									
103353	83-24-01	1		8.3	0.14	4	51	13	5.7	1.2	35	3	54	143	4255	366	19	0.4	10	5	0.4	0.5
103354	83-24-12	2							0		19	4	4									
103355	83-24-23	3							0		7	3	3									
103356	83-24-34	4							0		8	3	4									
103357	83-24-45	5							0		7	3	2									
103358	83-24-56	6							0		7	2	2									

TABLE 6									WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS												
Date:	**01/27/17**																			
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
103359	83-25-01	1		8.4	0.13	4	98	14	5.4	1.3	21	3	31	498	4022	442	25	1.8	2	3	0.9	1.1
103360	83-25-12	2							0		10	3	4									
103361	83-25-23	3							0		3	3	2									
103362	83-25-34	4							0		3	3	2									
103363	83-25-45	5							0		3	3	7									
103364	83-25-56	6							0		4	4	4									
103365	83-33-01	1	Blind	8.2	0.28	3	93	10	3.8	1.2	11	4	3	338	4260	443	31	2.3	5	4	0.8	0.5
103366	83-32-01	1	Dup 83-25-01	8.2	0.25	4	70	14	3.9	1.4	24	3	31	150	4386	541	20	3.2	8	5	0.7	0.9
103367	83-32-12	2	Dup 83-25-12						0		10	2	10									
103368	83-32-23	3	Dup 83-25-23						0		3	2	2									
103369	83-32-34	4	Dup 83-25-34						0		2	3	2									
103370	83-32-45	5	Dup 83-25-45						0		2	3	8									
103371	83-32-56	6	Dup 83-25-56						0		4	3	3									
103372	67-16-01	1		8.4	0.18	3	85	10	5.9	1.6	24	3	19	384	4361	452	26	2.4	7	3	0.9	0.8
103373	67-16-12	2							0		15	3	2									
103374	67-16-23	3							0		8	4	12									
103375	67-16-34	4							0		10	3	10									
103376	67-16-45	5							0		3	3	3									
103377	67-16-56	6							0		3	3	5									
103378	67-32-01	1	Dup 67-16-01	8.2	0.24	4	54	12	3.4	1.5	22	3	8	130	3790	366	18	2.6	10	6	0.5	0.6
103379	67-32-12	2	Dup 67-16-12						0		12	4	11									
103380	67-32-23	3	Dup 67-16-23						0		8	6	4									
103381	67-32-34	4	Dup 67-16-34						0		13	5	9									
103382	67-32-45	5	Dup 67-16-45						0		4	6	3									
103383	67-32-56	6	Dup 67-16-56						0		3	6	4									
103384	67-02-01	1		8.1	0.2	3	62	10	3.5	1.3	9	4	11	137	3839	401	19	2.5	11	2	0.6	0.7
103385	67-02-12	2							0		6	2	13									
103386	67-02-23	3							0		3	2	3									
103387	67-02-34	4							0		4	2	6									
103388	67-02-45	5							0		5	2	3									
103389	67-02-56	6							0		7	2	5									
103390	67-01-01	1		8	0.22	3	38	9	3.3	1.4	8	2	10	114	3641	273	15	2.1	9	5	0.9	0.5
103391	67-01-12	2							0		3	2	4									
103392	67-01-23	3							0		2	2	9									
103393	67-01-34	4							0		3	3	2									
103394	67-01-45	5							0		2	3	12									
103395	67-01-56	6							0		2	2	6									
103396	31-01-01	1		8.3	0.16	3	120	9	4.8	1.3	18	2	20	119	3524	439	18	2	8	4	0.8	0.3
103397	31-01-12	2							0		7	2	10									
103398	31-01-23	3							0		5	2	2									
103399	31-01-34	4							0		7	2	3									
103400	31-01-45	5							0		10	2	2									
103401	31-01-56	6							0		3	3	8									
103402	31-02-01	1		8.3	0.23	3	56	10	4.5	1.4	20	3	26	126	3325	249	13	1.9	6	2	1	0.5
103403	31-02-12	2							0		13	3	11									
103404	31-02-23	3							0		16	3	7									
103405	31-02-34	4							0		10	2	11									
103406	31-02-45	5							0		6	2	7									
103407	31-02-56	6							0		3	2	2									
103408	31-03-01	1		8.2	0.19	3	41	11	2.8	1.6	8	2	9	145	3119	268	13	2	9	3	1.1	0.4
103409	31-03-12	2							0		8	1	12									
103410	31-03-23	3							0		2	2	4									
103411	31-03-34	4							0		3	2	3									
103412	31-03-45	5							0		4	2	2									
103413	31-03-56	6							0		2	2	4									

TABLE 6

									WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS													
Date:	**01/27/17**																					
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
Date:	**11/13/17**																					
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
104473	31-07-01	1		8.2	0.29	4	41	12	3.5	1.6	8	3	26	197	3920	299	11	1.4	6	2	1.6	1.2
104474	31-07-12	2							0		6	2	23									
104475	31-07-34	3							0		2	1	2									
104476	31-07-45	4							0		3	2	5									
104477	31-07-56	5							0		2	1	6									
104478	31-07-23	6							0		3	2	10									
104479	31-08-01	1		8.3	0.26	4	53	13	5.3	1.7	38	5	49	499	3925	358	8	1.9	10	2	2.4	0.9
104480	31-08-12	2							0		11	4	28									
104481	31-08-23	3							0		6	3	8									
104482	31-08-34	4							0		27	5	12									
104483	31-08-45	5							0		5	3	2									
104484	31-08-56	6							0		6	3	2									
104485	31-09-01	1		8.3	0.34	4	44	12	4.9	1.5	18	4	40	385	3617	323	11	0.9	4	5	1.4	1.1
104486	31-09-12	2							0		16	4	8									
104487	31-09-23	3							0		11	3	23									
104488	31-09-34	4							0		17	5	3									
104489	31-09-45	5							0		11	4	2									
104490	31-09-56	6							0		8	4	5									
104491	31-10-01	1		8.2	0.22	4	53	18	3.4	1.6	41	5	37	416	3749	345	14	2.2	11	2	1.7	1
104492	31-10-12	2							0		10	6	20									
104493	31-10-23	3							0		10	5	3									
104494	31-10-34	4							0		8	4	2									
104495	31-10-45	5							0		6	3	3									
104496	31-10-56	6							0		5	2	3									
104497	31-11-01	1		8.3	0.38	3	47	10	4.9	1.7	5	2	16	207	3614	283	8	1.9	9	2	1.4	0.9
104498	31-11-12	2							0		3	1	8									
104499	31-11-23	3							0		2	1	8									
104500	31-11-34	4							0		2	2	15									
104501	31-11-45	5							0		2	2	2									
104502	31-11-56	6							0		2	1	3									
104503	31-12-01	1		8.1	0.3	5	70	20	4.3	1.6	16	5	27	336	4760	514	8	2.2	12	4	1.2	0.5
104504	31-12-12	2							0		5	4	2									
104505	31-12-23	3							0		6	3	3									
104506	31-12-34	4							0		2	2	4									
104507	31-12-45	5							0		2	1	4									
104508	31-12-56	6							0		2	1	3									
104509	31-13-01	1		8.2	0.29	4	43	18	2.7	1.7	7	4	54	276	3031	340	9	2.3	15	5	1.3	0.4
104510	31-13-12	2							0		6	4	14									
104511	31-13-23	3							0		3	2	10									
104512	31-13-34	4							0		17	5	4									
104513	31-13-45	5							0		6	3	5									
104514	31-13-56	6							0		3	2	3									

TABLE 6									**WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS**												
Date:	**01/27/17**																				
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
104515	83-28-01	1		8.4	0.25	5	32	20	4.8	1.6	10	4	9	254	3525	352	7	2.5	17	3	1.5	0.3
104516	83-28-12	2							0		8	3	9									
104517	83-28-23	3							0		5	3	11									
104518	83-28-34	4							0		2	2	6									
104519	83-28-45	5							0		3	2	3									
104520	83-28-56	6							0		2	1	3									
104521	83-33-12	1	Blind	8.3	0.24	5	39	21	4.6	1.4	11	5	13	263	3414	452	9	2.4	10	2	1.5	0.6
104522	67-32-01	1	Dup 31-07-01	7.8	0.15	5	43	22	3.8	1.5	9	6	27	283	4225	309	8	2.3	9	5	1.3	0.5
104523	67-32-12	2	Dup 31-07-12						0		6	3	15									
104524	67-32-23	3	Dup 31-07-34						0		2	1	2									
104525	67-32-34	4	Dup 31-07-45						0		3	2	5									
104526	67-32-45	5	Dup 31-07-56						0		2	2	2									
104527	67-32-56	6	Dup 31-07-23						0		2	1	6									
Date:	**11/22/17**																				
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
104560	83-31-01	1	Dup 83-35-01	8.2	0.75	5	119	19	3.6	1.2	35	12	31	421	3996	477	24	1.2	3	4	0.7	1.2
104561	83-31-12	2	Dup 83-35-12						0		11	4	3									
104562	83-31-23	3	Dup 83-35-23						0		6	2	2									
104563	83-31-34	4	Dup 83-35-34						0		5	2	2									
104564	83-31-45	5	Dup 83-35-45						0		5	2	8									
104565	83-31-56	6	Dup 83-35-56						0		5	2	7									
104566	83-33-01	1	Blind	8.1	0.39	4	56	18	3.5	1.1	14	5	4	211	3904	453	20	2.1	5	5	1.2	1.1
104567	83-34-01	1		8.3	0.47	5	70	19	5.3	1.2	17	6	23	340	3954	492	22	1.1	3	6	0.6	1.3
104568	83-34-12	1							0		3	2	3									
104569	83-34-23	2							0		2	1	2									
104570	83-34-34	3							0		6	2	11									
104571	83-34-45	4							0		3	2	23									
104572	83-35-01	1		8.5	0.35	4	111	17	5.8	1.2	31	9	5	310	4321	618	23	0.7	4	5	0.5	0.9
104573	83-35-12	2							0		13	5	3									
104574	83-35-23	3							0		5	2	3									
104575	83-35-34	4							0		4	1	3									
104576	83-35-45	5							0		4	3	3									
104577	83-35-56	6							0		5	2	5									
104578	83-36-01	1		8.4	0.51	5	108	20	5.6	1.3	14	5	20	216	4154	481	27	1.3	4	3	0.7	1.2
104579	83-36-12	2							0		21	7	2									
104580	83-36-23	3							0		7	2	5									
104581	83-36-34	4							0		2	1	6									
104582	83-36-45	5							0		2	2	5									
104583	83-36-56	6							0		2	1	8									
104584	83-37-01	1		8.4	0.46	5	56	21	5.3	1.2	27	9	42	413	3890	447	21	1.3	13	5	0.8	1.1
104585	83-37-12	2							0		2	2	6									
104586	83-37-23	3							0		2	1	2									
104587	83-37-34	4							0		24	8	13									
104588	83-37-45	5							0		2	1	4									
104589	83-37-56	6							0		2	2	9									
104590	83-38-01	1		8.4	0.34	5	48	19	5.1	1.1	5	2	4	218	3788	450	18	1.1	12	4	0.8	1.1
104591	83-38-12	2							0		2	2	2									
104592	83-38-23	3							0		2	1	9									
104593	83-38-34	4							0		4	3	22									
104594	83-38-45	5							0		2	2	20									
104595	83-38-56	6							0		2	1	36									

TABLE 6

WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS

Date:	01/27/17																					
Lab #	Field ID	Depth	Blind/Dup	pH	Salts	Texture	Na	CEC	Lime	%OM	NO3	NH4	P	K	Ca	Mg	S	Zn	Fe	Mn	Cu	B
104596	83-39-01	1		8.4	0.48	4	174	17	5.5	1.2	16	6	11	295	4083	519	26	1.1	11	2	1	1.5
104597	83-39-12	2							0		25	9	14									
104598	83-39-23	3							0		21	7	8									
104599	83-40-01	1		8.4	0.5	4	187	16	5.4	1.2	3	2	5	235	4009	553	24	0.9	10	3	0.8	1.4
104600	83-40-12	2							0		2	1	5									
104601	83-40-23	3							0		2	2	47									
104602	83-41-01	1		8.2	0.31	4	102	14	3.4	1.3	7	3	10	416	3758	497	20	1.9	5	2	1.4	1.4
104603	83-41-12	2							0		4	2	11									
104604	83-41-23	3							0		3	2	9									
104605	83-41-34	4							0		2	1	9									
Date:	12/18/17																					
Lab #	Field ID	Grid		pH	Salts	Texture	Na	CEC	Lime	%OM	NO3	NH4	P	K	Ca	Mg	S	Zn	Fe	Mn	Cu	B
104908	31-14-01	1		7.9	0.27	3	152	10	3.9	1.5	9	3	44	358	4313	507	35	4.8	50	10	2.6	1.3
104909	31-14-12	2							0		7	1	21									
104910	31-14-23	3							0		2	1	7									
104911	31-14-34	4							0		2	1	7									
104912	31-14-45	5							0		2	1	8									
104913	31-14-56	6							0		2	1	6									
104914	31-15-01	1		8	0.54	5	132	20	3.8	1.6	26	1	50	341	4232	452	34	4.3	47	9	2.1	1.1
104915	31-15-12	2							0		13	1	19									
104916	31-15-23	3							0		11	1	9									
104917	31-15-34	4							0		4	1	4									
104918	31-15-45	5							0		4	1	13									
104919	31-15-56	6							0		2	2	7									
104920	31-16-01	1		7.9	0.3	4	99	14	3.4	1.7	8	3	41	454	3810	444	23	5.4	52	7	2.3	1.1
104921	31-16-12	2							0		8	1	31									
104922	31-16-23	3							0		4	2	14									
104923	31-16-34	4							0		3	1	16									
104924	31-16-45	5							0		3	2	4									
104925	31-16-56	6							0		2	2	7									
104926	31-33-01	1	Dup 31-14-01	8.2	0.27	4	115	16	3.2	1.8	6	1	34	376	3510	425	25	4.9	53	8	2.3	1.1
104927	31-33-12	2	Dup 31-14-12						0		18	1	12									
104928	31-33-23	3	Dup 31-14-23						0		11	1	10									
104929	31-33-34	4	Dup 31-14-34						0		5	1	15									
104930	31-33-45	5	Dup 31-14-45						0		2	2	8									
104931	31-33-56	6	Dup 31-14-56						0		2	3	6									
104932	67-28-01	1		7.8	0.35	4	88	18	3.2	1.6	3	1	21	170	3611	478	28	4.1	50	11	2.2	0.9
104933	67-28-12	2							0		2	2	11									
104934	67-28-23	3							0		2	3	3									
104935	67-28-34	4							0		2	3	8									
104936	67-28-45	5							0		2	2	5									
104937	67-28-56	6							0		2	3	9									
104938	67-29-01	1		8	0.38	5	74	20	3.2	1.8	12	1	25	213	3550	545	31	2.7	41	12	1.4	0.4
104939	67-29-12	2							0		5	1	6									
104940	67-29-23	3							0		7	1	9									
104941	67-29-34	4							0		4	1	6									
104942	67-29-45	5							0		2	1	10									
104943	67-29-56	6							0		13	2	4									

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TABLE 6

									WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS													
Date:	**01/27/17**																					
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
104944	67-30-01	1		8.4	0.32	5	162	21	5.9	1.4	20	1	21	228	4387	526	35	3.8	53	10	2.4	1.2
104945	67-30-12	2							0		7	11	4									
104946	67-30-23	3							0		8	1	3									
104947	67-30-34	4							0		6	1	15									
104948	67-30-45	5							0		4	1	10									
104949	67-30-56	6							0		2	1	4									
104950	67-05-01	1		8	0.19	4	130	16	4.1	1.5	2	3	10	183	4530	567	38	2.8	41	13	1.4	0.9
104951	67-05-12	2							0		2	1	16									
104952	67-05-23	3							0		2	1	11									
104953	67-05-34	4							0		2	1	9									
104954	67-05-45	5							0		2	2	5									
104955	67-05-56	6							0		2	1	3									
104956	67-06-01	1		7.8	0.34	3	82	10	3	1.6	2	1	12	141	3350	392	23	3.2	55	15	1.5	0.5
104957	67-06-12	2							0		3	1	17									
104958	67-06-23	3							0		19	6	3									
104959	67-06-34	4							0		2	1	3									
104960	67-06-45	5							0		2	2	3									
104961	67-06-56	6							0		22	2	4									
Date:	**01/08/18**																					
Lab #	**Field ID**	**Grid**		**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**Nh4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
60001	31-17-01	1		8.1	0.25	3	52	10	2.6	1.4	7	2	40	353	2867	332	11	2	18	4	1.3	2.3
60002	31-17-12	2							0		5	2	26									
60003	31-17-23	3							0		7	2	26									
60004	31-17-34	4							0		6	2	38									
60005	31-17-45	5							0		2	1	9									
60006	31-17-56	6							0		4	1	2									
60007	31-18-01	1		8.2	0.18	3	65	9	3.3	1.3	4	2	6	142	3631	302	17	4.8	24	8	2.4	1.6
60008	31-18-12	2							0		2	1	8									
60009	31-18-23	3							0		4	1	17									
60010	31-18-34	4							0		2	2	3									
60011	31-18-45	5							0		2	1	7									
60012	31-18-56	6							0		2	1	3									
60013	31-19-01	1		8.3	0.16	4	74	14	5.3	1.5	17	6	11	192	3937	328	18	3.1	23	7	1.2	1.2
60014	31-19-12	2							0		4	3	5									
60015	31-19-23	3							0		4	1	4									
60016	31-19-34	4							0		2	1	7									
60017	31-19-45	5							0		2	1	3									
60018	31-19-56	6							0		2	2	14									
60019	83-33-01	1	Blind	8.1	0.29	4	41	16	3.6	1.6	10	4	12	200	4048	352	19	3.5	22	7	1.3	1.2
60020	31-20-01	1		8.2	0.16	3	63	10	2.7	1.4	6	2	14	185	2956	247	15	4.3	27	17	2.1	1.3
60021	31-20-12	2							0		28	7	12									
60022	31-20-23	3							0		2	1	2									
60023	31-20-34	4							0		4	3	5									
60024	31-20-45	5							0		10	4	5									
60025	31-20-56	6							0		5	2	2									
60026	83-22-23	3							0		2	1	2									

TABLE 6

									WESTERN LABORATORIES ISWCC 2017-2018 DEEP SOIL SAMPLING RAW DATA: TWIN FALLS, MINIDOKA, MARSH CREEK NITRATE PRIORITY AREAS													
Date:	**01/27/17**																					
Lab #	**Field ID**	**Depth**	**Blind/Dup**	**pH**	**Salts**	**Texture**	**Na**	**CEC**	**Lime**	**%OM**	**NO3**	**NH4**	**P**	**K**	**Ca**	**Mg**	**S**	**Zn**	**Fe**	**Mn**	**Cu**	**B**
60027	31-21-01	1		8.2	0.25	3	52	9	2.9	1.5	5	2	10	266	3204	272	16	2.6	19	6	2	1
60028	31-21-12	2							0		5	2	11									
60029	31-21-23	3							0		19	7	6									
60030	31-21-34	4							0		3	1	2									
60031	31-21-45	5							0		3	1	3									
60032	31-21-56	6							0		2	1	5									
60033	67-24-01	1		8.4	0.58	3	65	10	4.1	1.6	28	7	5	182	3057	345	16	2.7	15	5	1.3	1.1
60034	67-24-12	2							0		10	3	10									
60035	67-24-23	3							0		2	1	2									
60036	67-24-34	4							0		30	9	13									
60037	67-24-45	5							0		29	8	7									
60038	67-24-56	6							0		8	3	3									
60039	83-22-56	6							0		5	2	11									
60040	67-25-01	1		8.4	0.38	4	75	14	4.1	1.5	29	8	11	251	3066	379	13	3.3	23	8	1.7	1.6
60041	67-25-12	2							0		6	2	17									
60042	67-25-23	3							0		2	1	5									
60043	67-25-34	4							0		18	5	2									
60044	67-25-45	5							0		2	1	3									
60045	67-25-56	6							0		2	2	8									
60046	83-22-12	2							0		27	9	4									
60047	67-26-01	1		8.3	0.43	4	84	16	5	1.4	6	2	11	248	3725	422	18	4.1	18	8	1.7	1.5
60048	67-26-12	2							0		25	6	2									
60049	67-26-23	3							0		3	1	2									
60050	67-26-34	4							0		2	1	2									
60051	67-26-45	5							0		2	1	4									
60052	67-26-56	6							0		25	8	2									
60053	83-22-34	4							0		3	2	5									
60054	67-27-01	1		7.7	0.44	3	62	10	3.2	1.3	17	5	33	199	3588	395	15	4	31	12	2	1.1
60055	67-27-12	2							0		10	4	17									
60056	67-27-23	3							0		7	3	3									
60057	67-27-34	4							0		7	3	6									
60058	67-27-45	5							0		2	1	6									
60059	67-27-56	6							0		2	1	4									
60060	83-22-45	5							0		2	2	21									
60061	83-27-01	1		7.9	0.28	4	42	16	3.6	1.4	35	10	48	235	4022	380	17	4.4	17	6	1.6	1.9
60062	83-27-12	2							0		65	11	10									
60063	83-27-23	3							0		39	8	2									
60064	83-27-34	4							0		18	6	7									
60065	83-27-45	5							0		18	5	20									
60066	83-27-56	6							0		8	3	30									
60067	83-22-01	1		8.1	0.41	4	73	13	3.8	1.3	17	6	38	352	4192	458	12	3.5	28	10	1.7	0.9

Deep Soil Sampling Project: Marsh Creek, Minidoka and Twin Falls Nitrate Priority Areas

ECOPOINT, INC

Michael Clancy, David Graybill
EcoPoint Inc., Kimberly, Idaho

Introduction

The IDEQ, IDWR, and ISWCC have defined 34 groundwater Nitrate Priority Areas in Idaho (IDEQ, 2014). These areas have at least 25% of their wells containing at least half of the EPA's maximum contaminant level of 10 mg nitrate liter^{-1} water. Agriculture fertilizers have been identified among other sources in contributing to the degradation of the Snake River Plain Aquifer (IDEQ, 2016). Nitrogen found below the root zone at the end of the growing season indicates a need for improved nutrient and irrigation water management techniques. The present study evaluates the effectiveness of management techniques to reduce impacts to degraded ground water and to restore water quality.

Project Goals

Establishing baseline data: Provide field specific baseline data regarding the nitrogen content of soils underlying a variety of soil, crop, nutrient sources, and irrigation systems

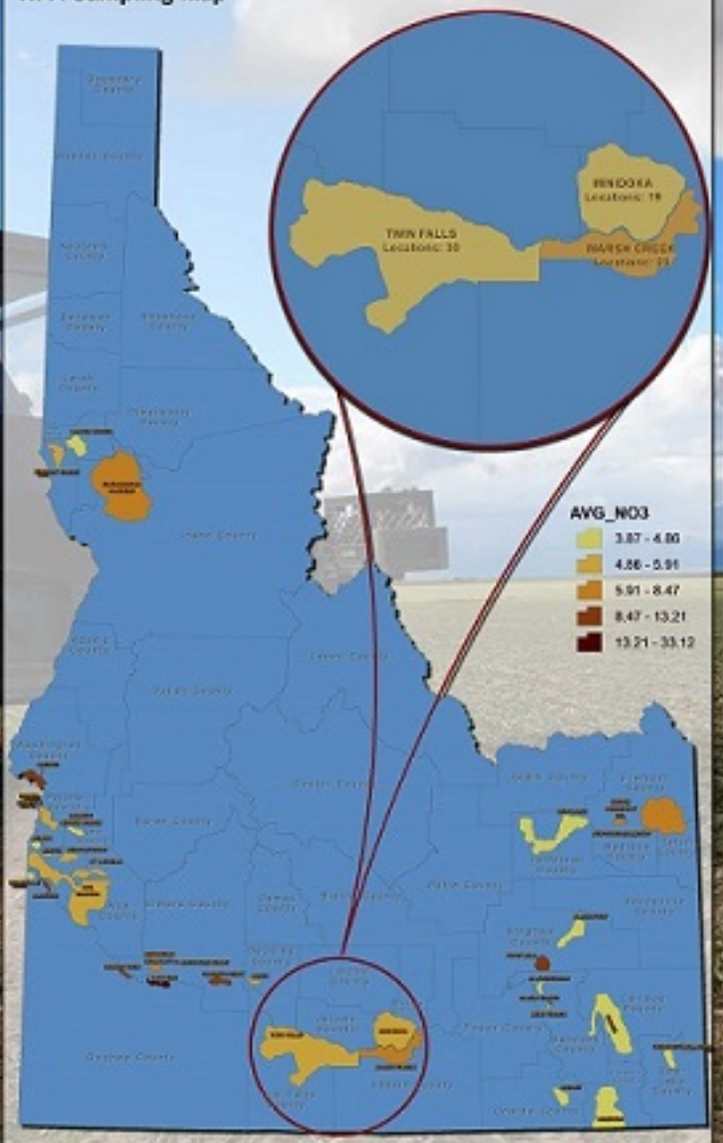
Educating producers: Provide the foundation for a technically based education program. The intent of the project is to provide field specific information to producers that they will use to evaluate their current nutrient and irrigation water management practices

Serving as a pilot project: Provide information about project design, practical realities, time requirements, and costs that can be used in developing similar projects

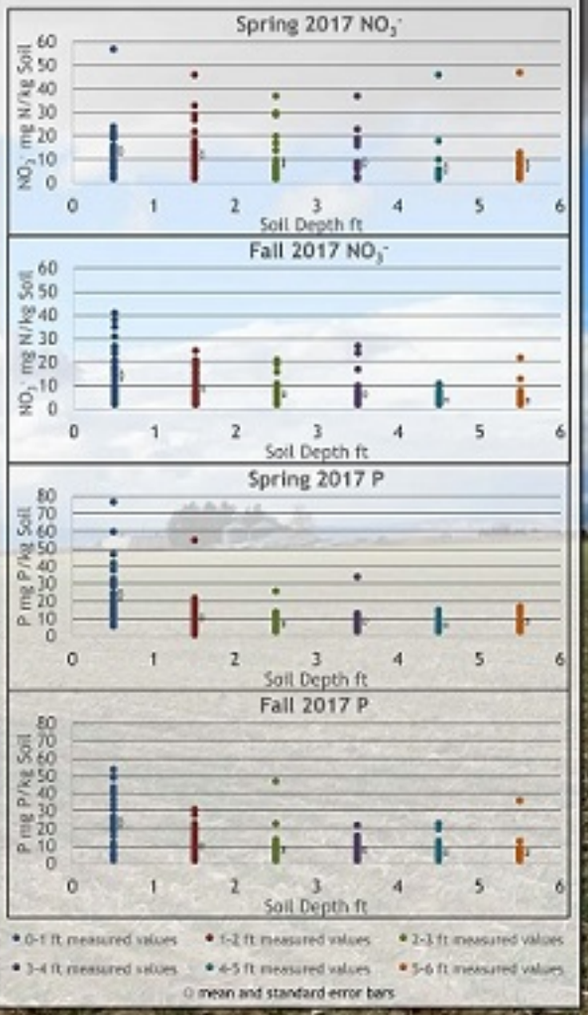
Project Procedure

- **Field selection**
  - Project areas defined within ¼ mile of NPA and ground water source delineations
  - Crop producer participation solicited by mailings and outreach
- **Site preparation**
  - Establish unique identification number (UIN) for producer confidentiality
  - Deliver Deep Soil Sampling Program Questionnaire to producers
  - Gain producer input on field activity
  - Locate public & private utilities
- **Determine sampling zone**
  - Set in uniform conditions (i.e. soil type, topography, management)
- **Sampling equipment:** AMS Ag Probe 9110 (direct push technology)
- **Soil Sampling**
  - Five sample locations per sampling zone/field
  - Sample to 6 ft, collecting discrete samples in 1 ft increments
  - Composite samples resulting in 6 samples per field
- **Quality control**
  - Field duplicate samples and samples of know analysis
  - In field soil sampling procedures audit
- **Laboratory analysis**
  - Micro and macro nutrients 0-1 ft soil depth, NO_3/NH_4 & P at all soil depths
- **Deliver soil test results**
  - Results hosted online by a third party in an excel spreadsheet

NPA Sampling Map



Results



Future Project Enhancements

- Assist crop producers in interpreting their deep soil sampling results by providing analysis through consultation
- Continuation of the PHDSS project would result in improved analysis and nutrient management opportunities

Sampling Method




Acknowledgments

Thank you to the following individuals; Carolyn Firth, Chuck Pentzer, Ralph Fisher, Ed Hagen, Flint Hall, Amy Williams, April Leytem, and Irene Nautch. This project was funded by the IDEQ.

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AGENDA ITEM #5D
APRIL 12, 2018

Idaho Soil & Water
Conservation Commission

Final Report: Deep Soil Sampling Project for Marsh Creek, Minidoka, Twin Falls Priority Areas

Conservation the Idaho Way: Sowing the Seeds of Stewardship

IDAHO SOIL & WATER CONSERVATION COMMISSION

PROJECT DESCRIPTION

- IDEQ provided $40,000 to ISWCC to work with producers & manage the project.
- Samples were taken following harvest of crops.
- Samples were taken every foot up to 6 feet maximum.
- Samples were analyzed for N, P, K, and other parameters in the 1st foot, and nitrate-N, ammonium-N and P in the deeper samples.
- Grower participation was voluntary; field locations and ownership is confidential.
- Growers completed a questionnaire regarding current and historic management practices on sampled fields.

PROJECT GOALS

- Establish baseline data
- Provide information/education to producers
- Be an example (pilot) project that can be modeled in the future in other areas

PROJECT LOCATION

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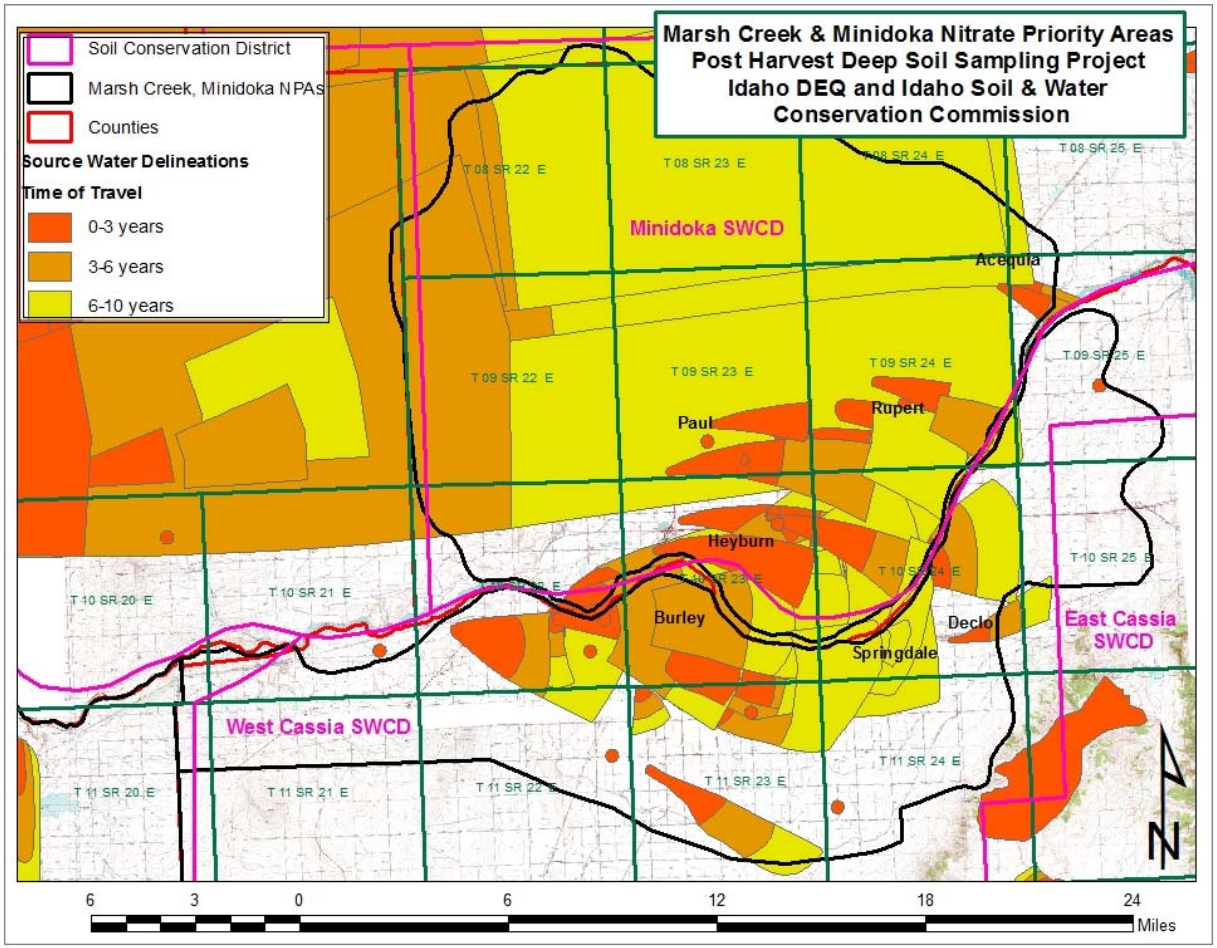
Marsh Creek Nitrate Priority Area in Cassia County - Ranked # 1

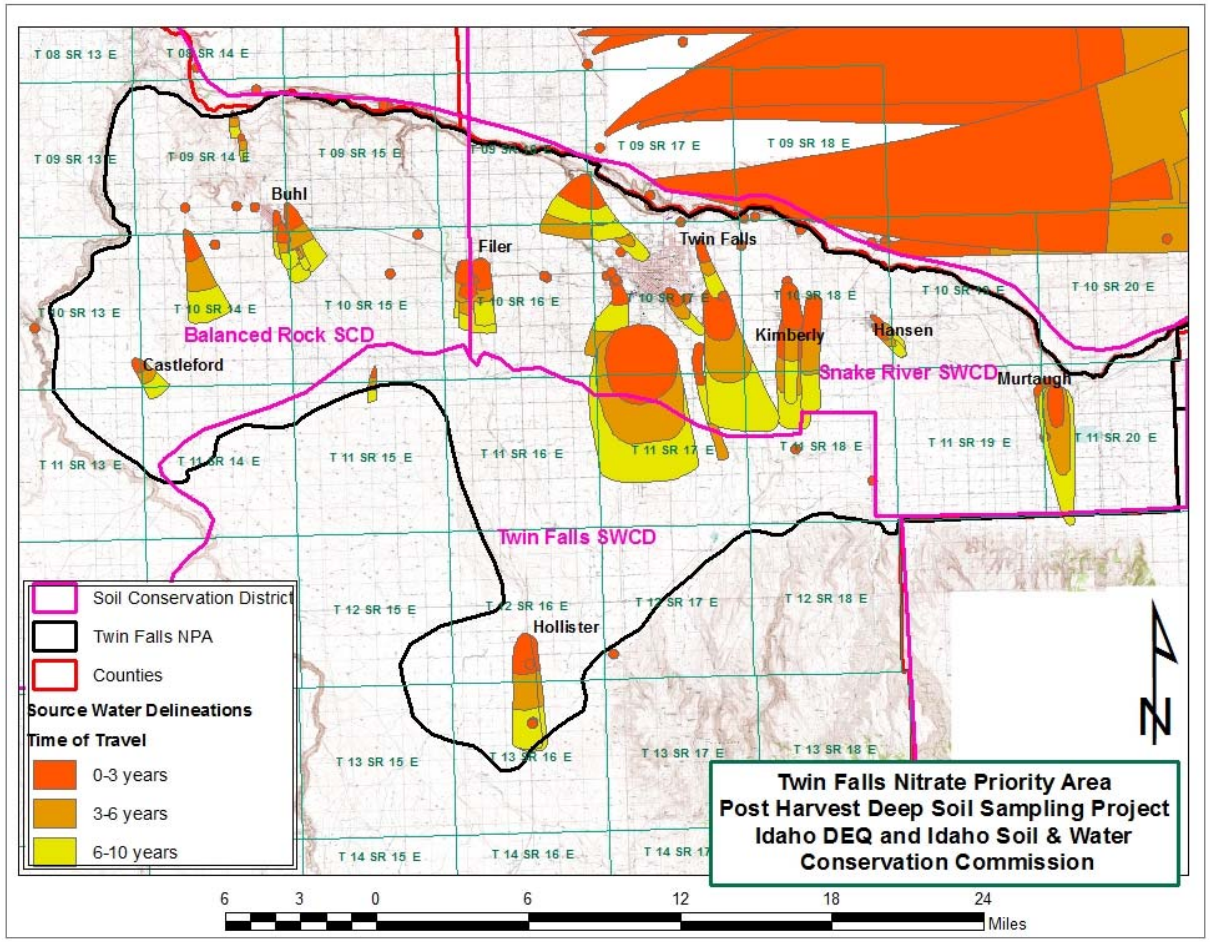
Twin Falls Nitrate Priority Area in Twin Falls County – Ranked # 21

Minidoka Nitrate Priority Area in Minidoka County - Ranked # 25

PROJECT LOCATION



PROJECT LOCATION



PROJECT RESULTS

TOTAL FIELDS SAMPLED

	Marsh Creek	Minidoka	Twin Falls
Fall 2016	2	-	-
Spring 2017	4	4	22
Fall 2017	18	12	14
TOTALS	24	16	36

Total Number of Producers Involved: 24
Field Questionnaires Received: 86% of all fields sampled

Overall Assessment and Future Plans

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- **Producers felt the project was very worthwhile**
- **Continue with outreach & education for producers**
- **If more funding becomes available, continue project**

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THANK YOU/QUESTIONS?

Handed out at 4/12/2018 meeting

IDAHO SOIL & WATER CONSERVATION COMMISSION

ITEM #5c

TO: CHAIRMAN WRIGHT, COMMISSIONERS ROEMER, RADFORD, SLICHTER, AND TREBESCH
FROM: TERRY HOEBELHEINRICH, LOAN OFFICER
DATE: August 9, 2017
RE: ANNUAL REVIEW & SETTING OF RESOURCE CONSERVATION AND RANGELAND DEVELOPMENT PROGRAM INTEREST RATES

Per administrative rule 60.05.01 the Commission shall determine interest rates not to exceed 6% annually.

Background

FISCAL YEAR			APPROPRIATION / SPENDING AUTHORITY	EXPENSES	APPROPRIATION LESS EXPENSES
2013			$290,100	$276,248	$13,852
2014			$290,100	$242,531	$47,569
2015			$297,500	$239,385	$58,115
2016			$301,300	$235,573	$65,727
2017			$312,000	$237,009	$75,999
2018			$313,500	?	?

FISCAL YEAR	RCRDP REVENUE (ACTUAL OR PROJECTED)	TREASURY (REVENUE) (ACTUAL OR PROJECTED)	TOTAL REVENUE PROJECTED)	EXPENSES	REVENUE LESS EXPENSES
2013	$238,480	$20,233	$258,713	$276,248	($17,535)
2014	$170,452	$17,425	$187,877	$242,531	($54,654)
2015	$136,047	*-$13,660	$122,387	$239,385	($116,998)
2016	$112,267	$32,619	$144,886	$235,573	($90,487)
2017	$101,700	$59,310	$161,010	$237,009	($75,999)
2018	$89,323	$74,345	$163,668	$249,300	($85,632)
Change ('17-'18)	($12,377)	$15,035	$2,658	$12,291	($9,633)

96,000 37,000

Assumes

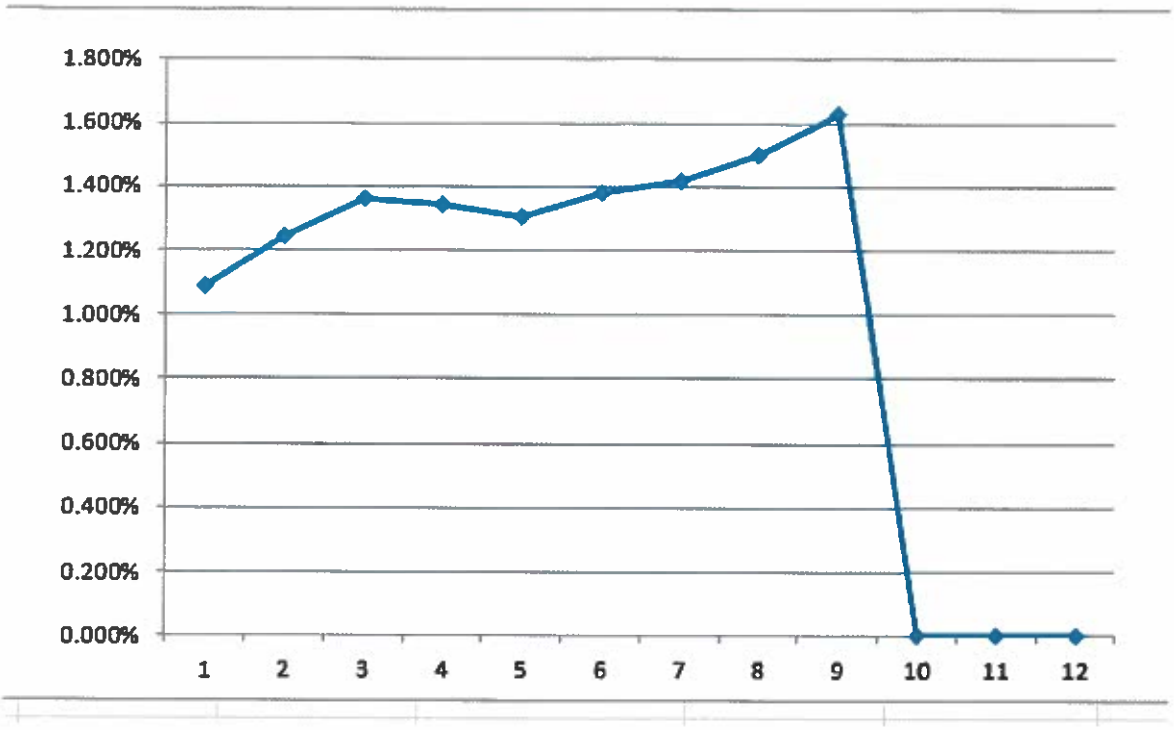
- *Includes $32,931 loss from Idaho Treasury Bond Losses
- 3.17% average interest rate for RCRDP portfolio (3.67% in FY 17)
- 1.06% estimated FY 2018 interest rate for treasury (cash) (0.85% in FY 17) (0.47 % in FY 16)

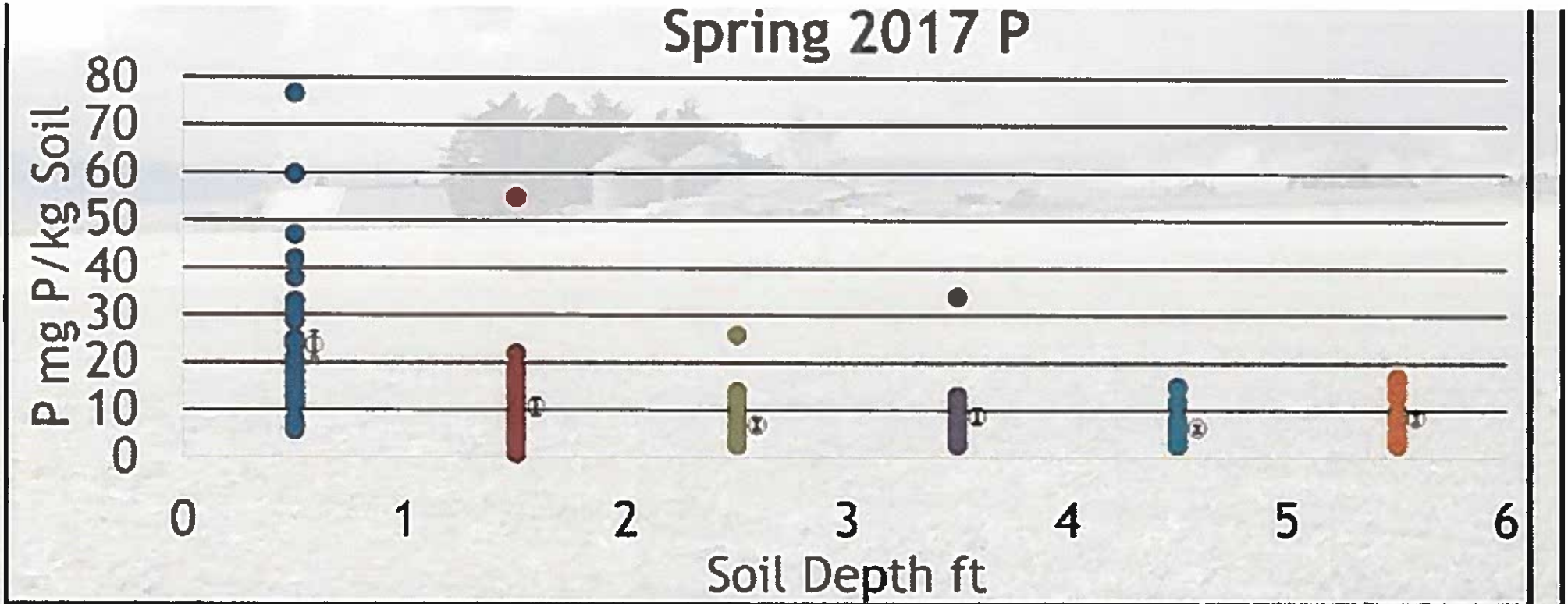
Index		Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	Jan-18	Feb-18	Mar-18
	7325	$ 19.99	$ 18.20	$ 19.19	$ 17.86	$ 17.85	$ 18.12	$ 17.03	$ 10.35	$ 15.40
	7351	$ 6,471.32	$ 7,106.32	$ 8,026.74	$ 7,682.29	$ 7,913.60	$ 8,139.96	$ 8,394.68	$ 8,818.32	$ 8,670.56
	7351			$ 52.35	$ 50.19	$ 60.81	$ 64.37	$ 71.00	$ 71.33	$ 69.46
	7361	$ 43.63	$ 46.45							
Subtotals		$ 6,534.94	$ 7,170.97	$ 8,098.28	$ 7,750.34	$ 7,992.26	$ 8,222.45	$ 8,482.71	$ 8,900.00	$ 8,755.42

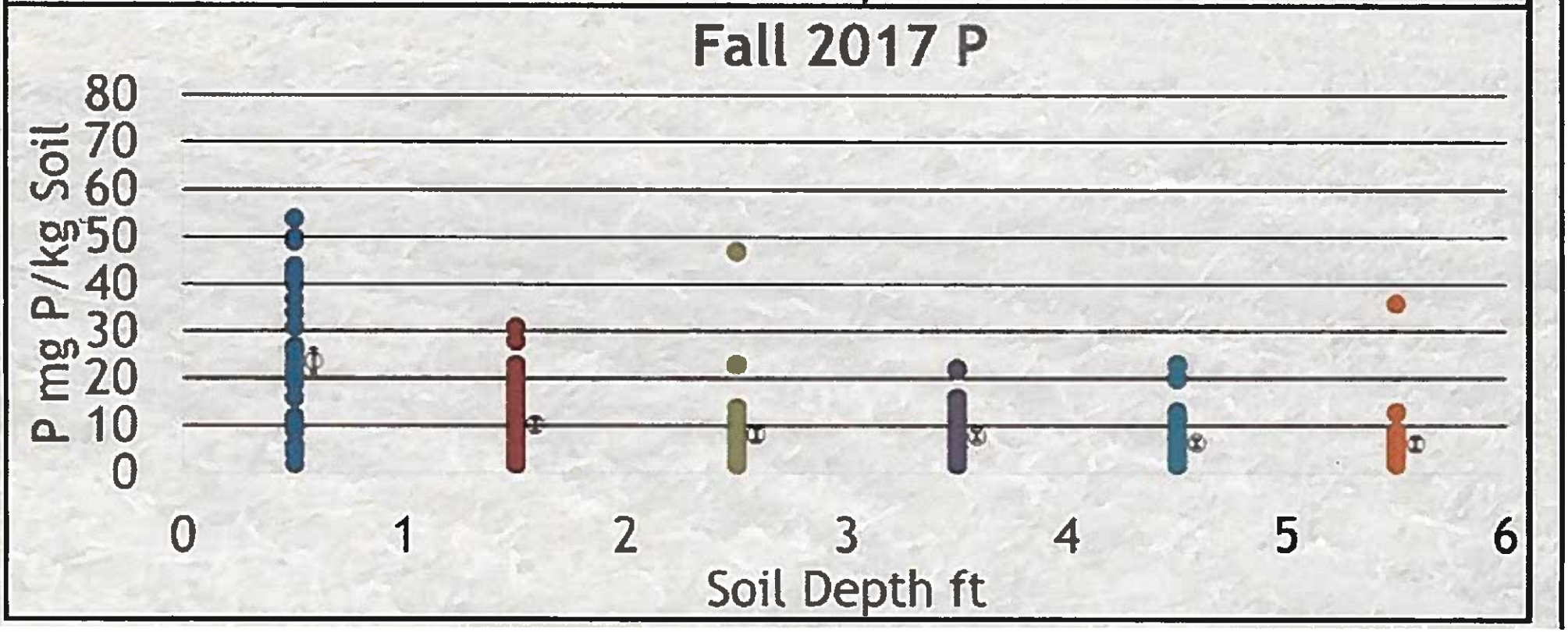
ave. daily balance	$ 6,992,420.03	$ 6,964,262.51	$6,955,360.87	$ 6,953,595.56	$ 7,128,736.10	$ 7,227,362.89	$7,040,252.97	$ 6,990,193.12	$ 6,985,490.21
days/previous month	31	30	31	30	31	30	31	31	28
	365	365	365	365	365	365	365	365	365
	1.090%	1.241%	1.359%	1.344%	1.307%	1.381%	1.416%	1.497%	1.631%

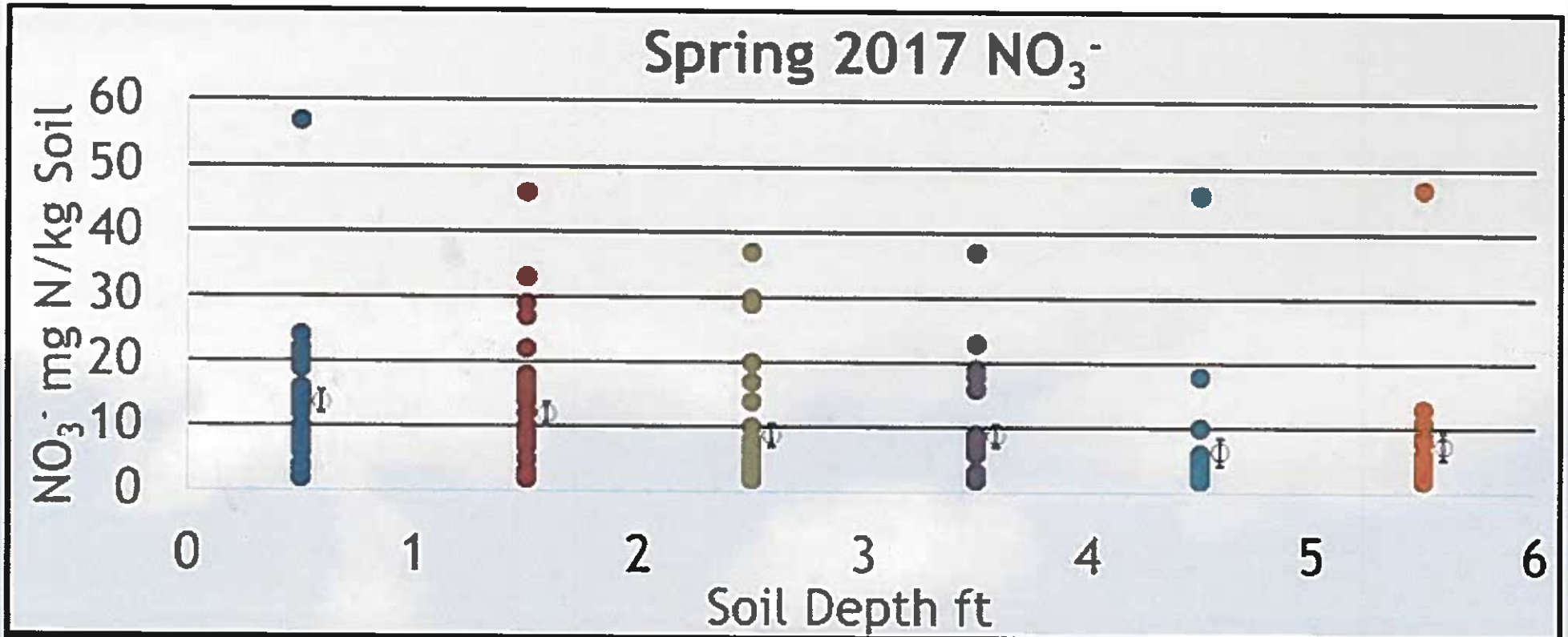
$71223

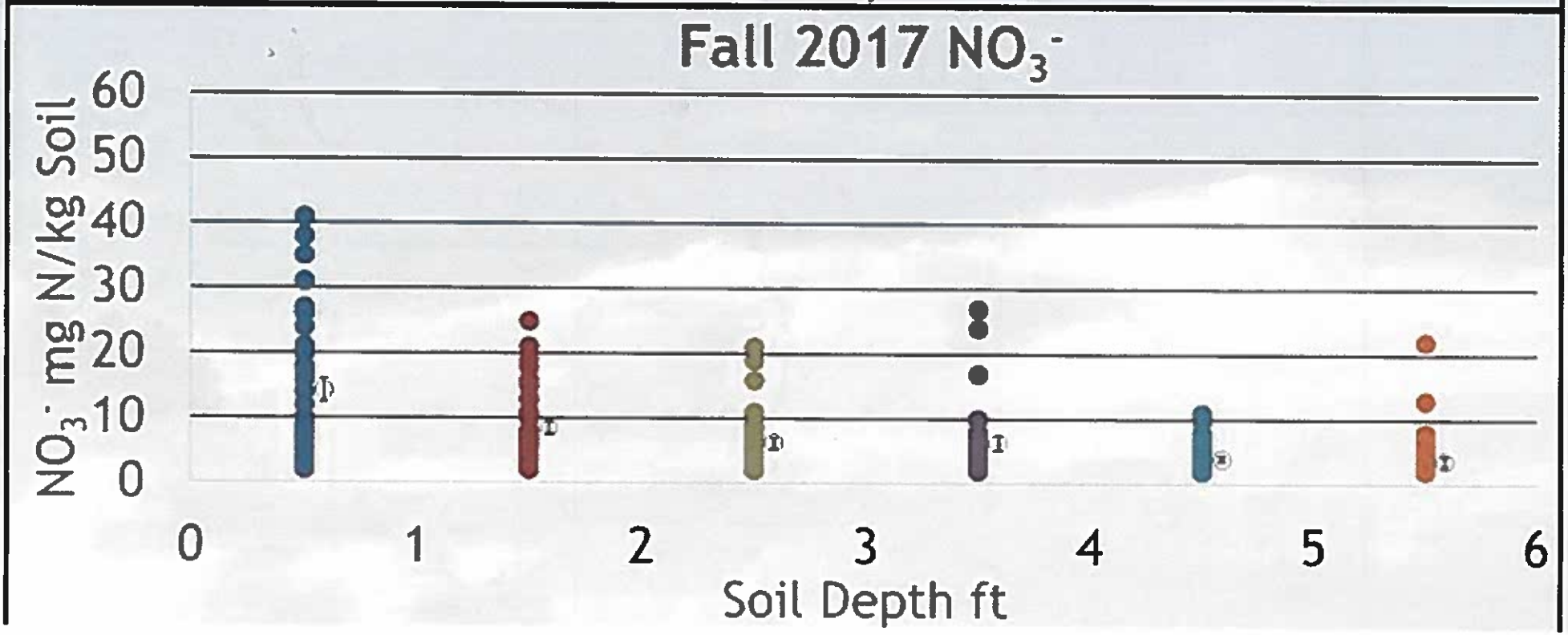
Handed out at 4/12/2018 mtg


1.800%
1.600%
1.400%
1.200%
1.000%
0.800%
0.600%
0.400%
0.200%
0.000%
1
2
3
4
5
6
7
8
9
10
11
12


Spring 2017 P
P mg P/kg Soil
80
70
60
50
40
30
20
10
0
0
1
2
3
4
5
6
Soil Depth ft


Fall 2017 P
P mg P/kg Soil
80
70
60
50
40
30
20
10
0
0
1
2
3
4
5
6
Soil Depth ft


Spring 2017 NO_3^-
NO_3^- mg N/kg Soil
60
50
40
30
20
10
0
0
1
2
3
4
5
6
Soil Depth ft


Fall 2017 NO_3^-
NO_3^- mg N/kg Soil
60
50
40
30
20
10
0
0
1
2
3
4
5
6
Soil Depth ft