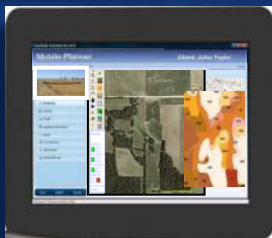


Focusing Technology to Support NRCS' Streamlined Conservation Delivery

October 2011



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Office of the Chief, USDA-NRCS

For more information:
<http://www.nrcs.usda.gov>
and search "CDSI"

What is CDSI?

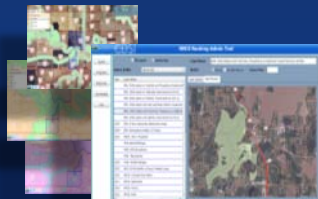
In early 2009, NRCS initiated an Agency-wide effort (CDSI) to design and implement a more effective & efficient business model for delivering conservation (technical & financial assistance).

Objectives



1. *Simplified conservation delivery for both clients & employees*

2. *More efficient, streamlined business processes*



3. *Increased focus on science-based conservation planning*

CDSI's goals will allow NRCS to focus on its core mission

- ✓ a delivery model built around science-based conservation planning
- ✓ field staff spending up to 75% of their time in field with clients
- ✓ decrease the 'overhead' to administer financial assistance
- ✓ enhanced client service, with more timely program delivery
- ✓ enhanced financial management & accountability
- ✓ fully integrated environmental 'outcomes' technology

Five major initiatives will help NRCS accomplish these goals

1. Streamlined Business Processes

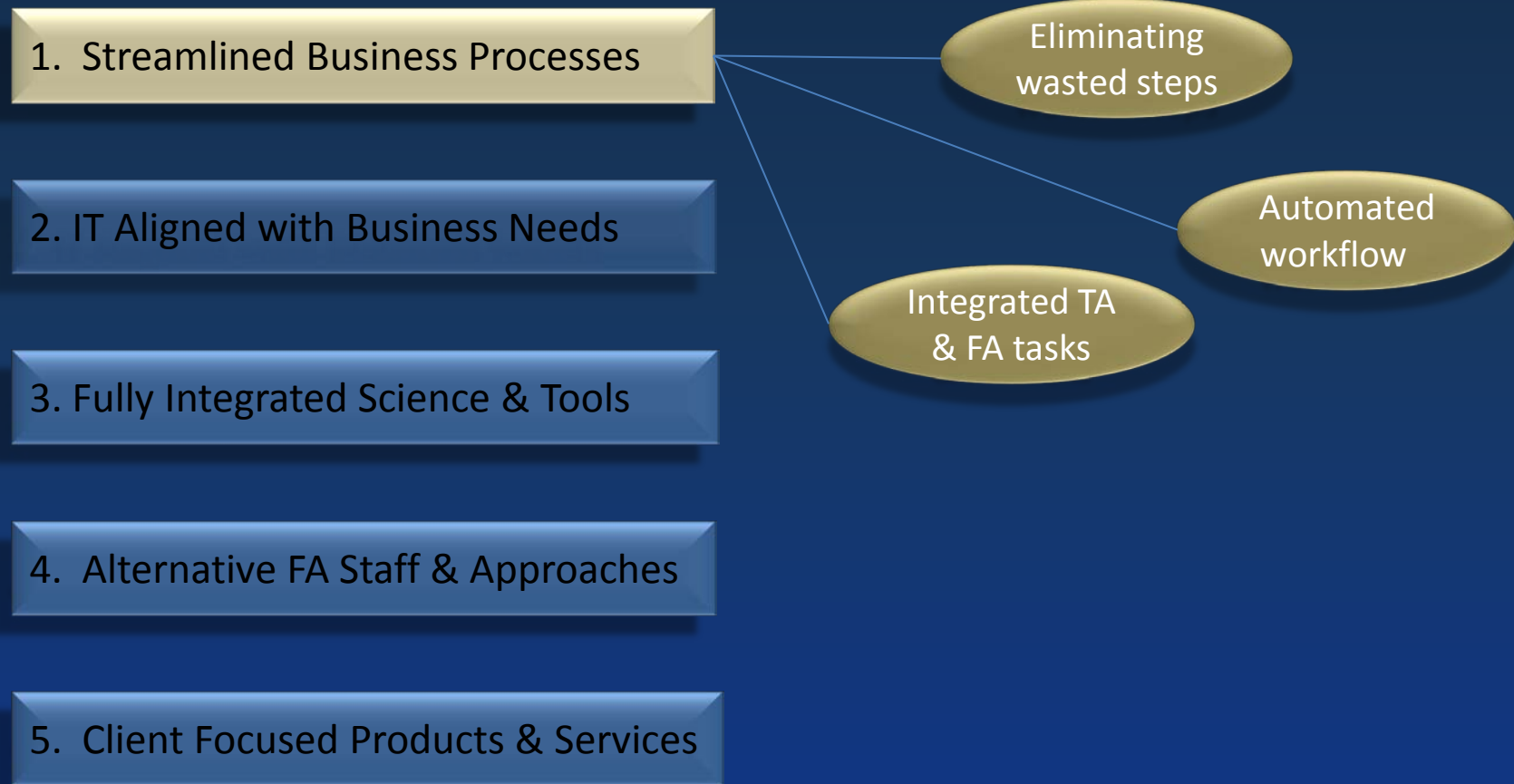
2. IT Aligned with Business Needs

3. Fully Integrated Science & Tools

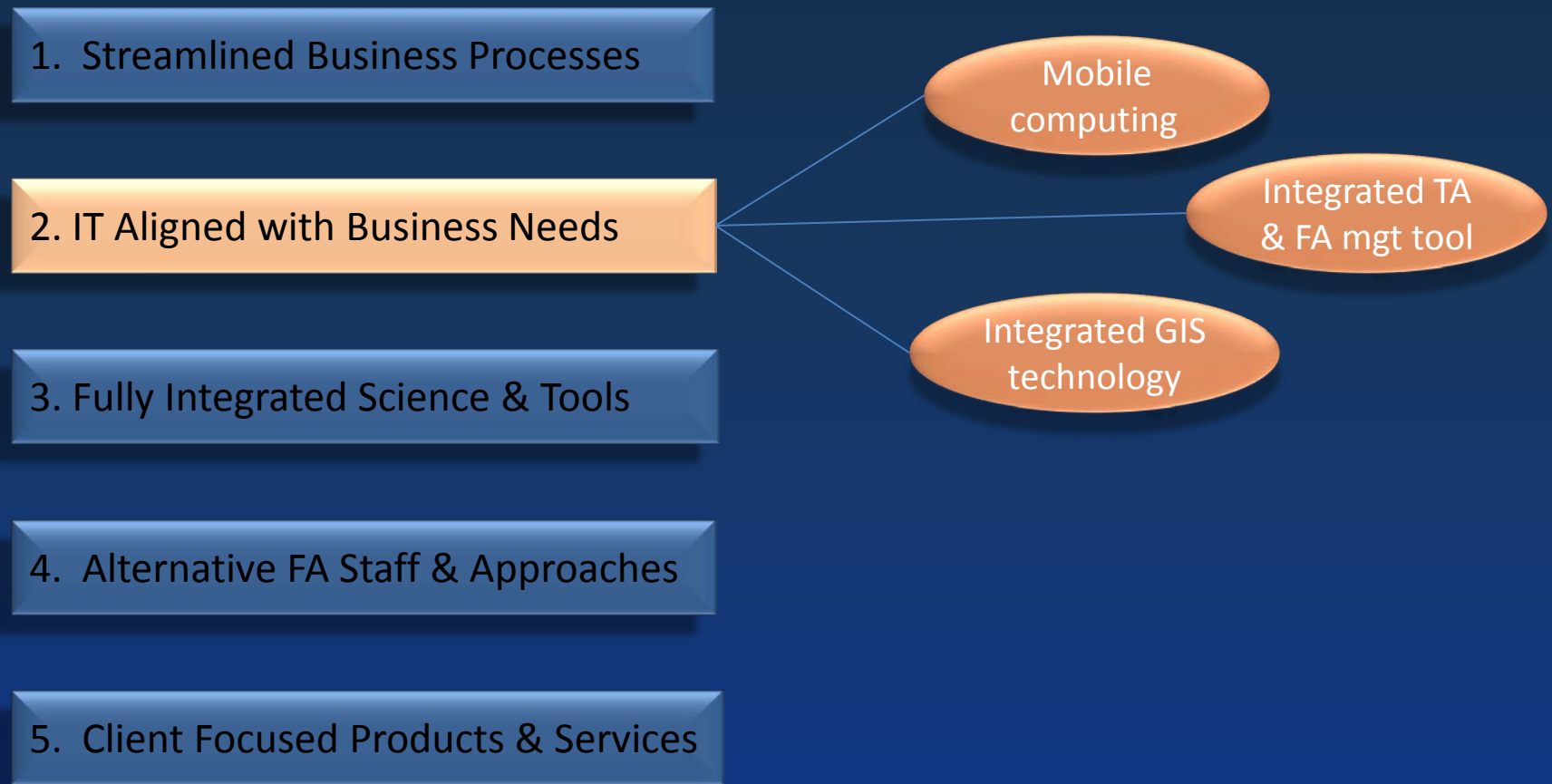
4. Alternative FA Staff & Approaches

5. Client Focused Products & Services

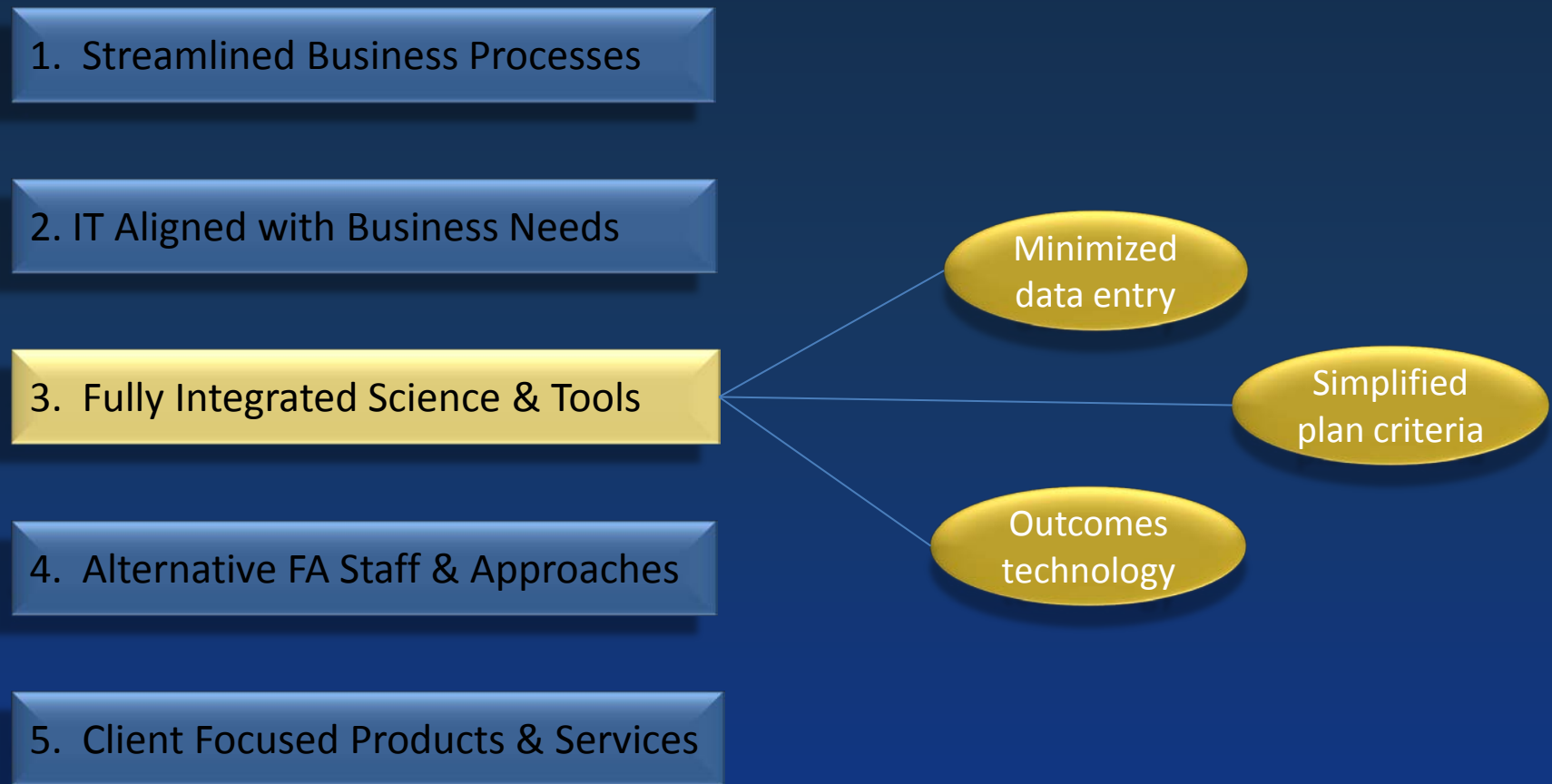
Streamlined processes will increase efficiency -- eliminating unnecessary tasks and automating workflow.



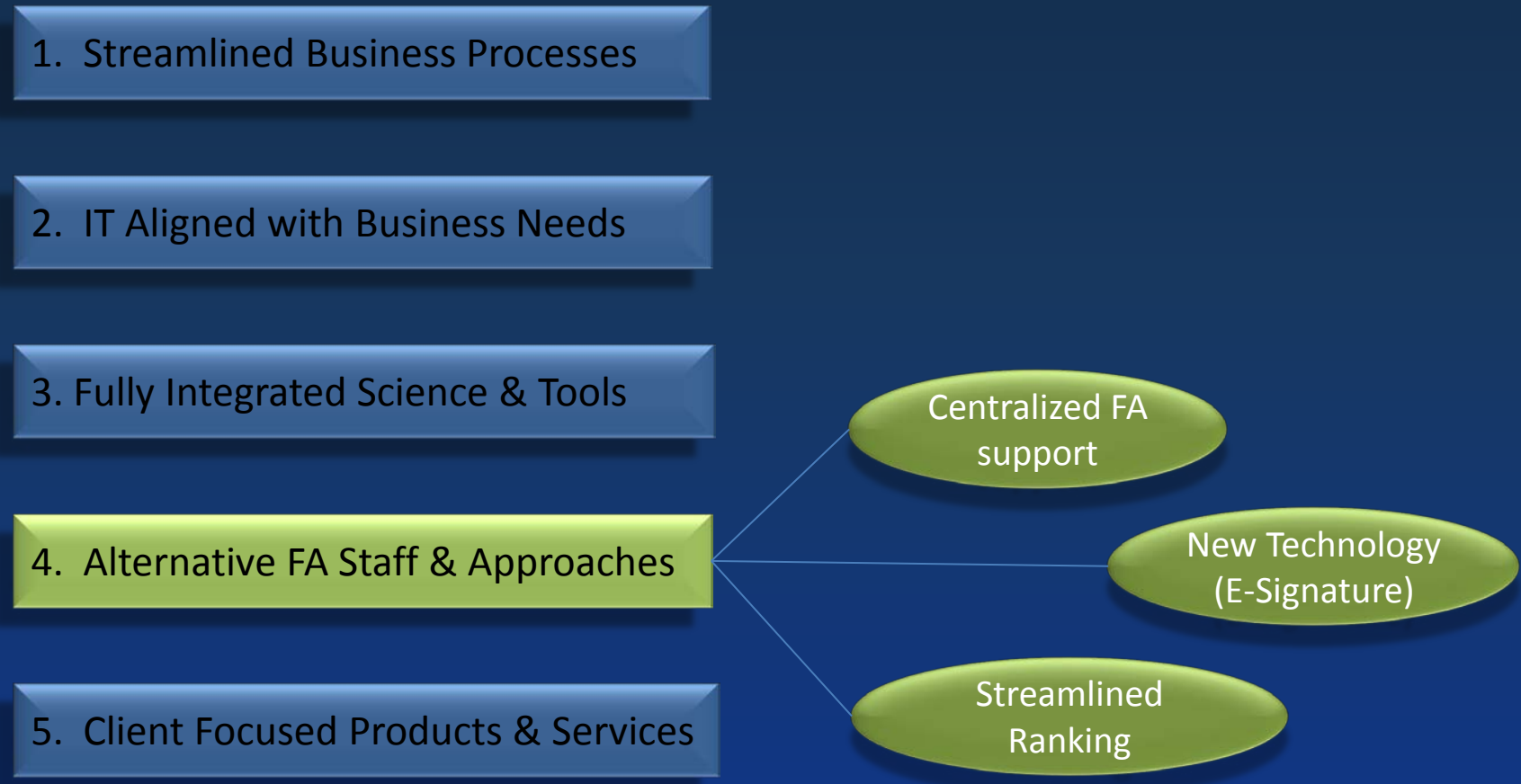
Better aligning information technology around streamlined business processes will allow NRCS to work more effectively -- anywhere, anytime.



Restructured science and technology will streamline planning processes and document environmental outcomes for clients.



New technologies and focused FA support will result in more timely program delivery and free up over 1300 field technical staff for planning in the field with clients.



Clients will be able to do many tasks with NRCS on-line 24/7, adding convenience and eliminating trips to the office.

1. Streamlined Business Processes

2. IT Aligned with Business Needs

3. Fully Integrated Science & Tools

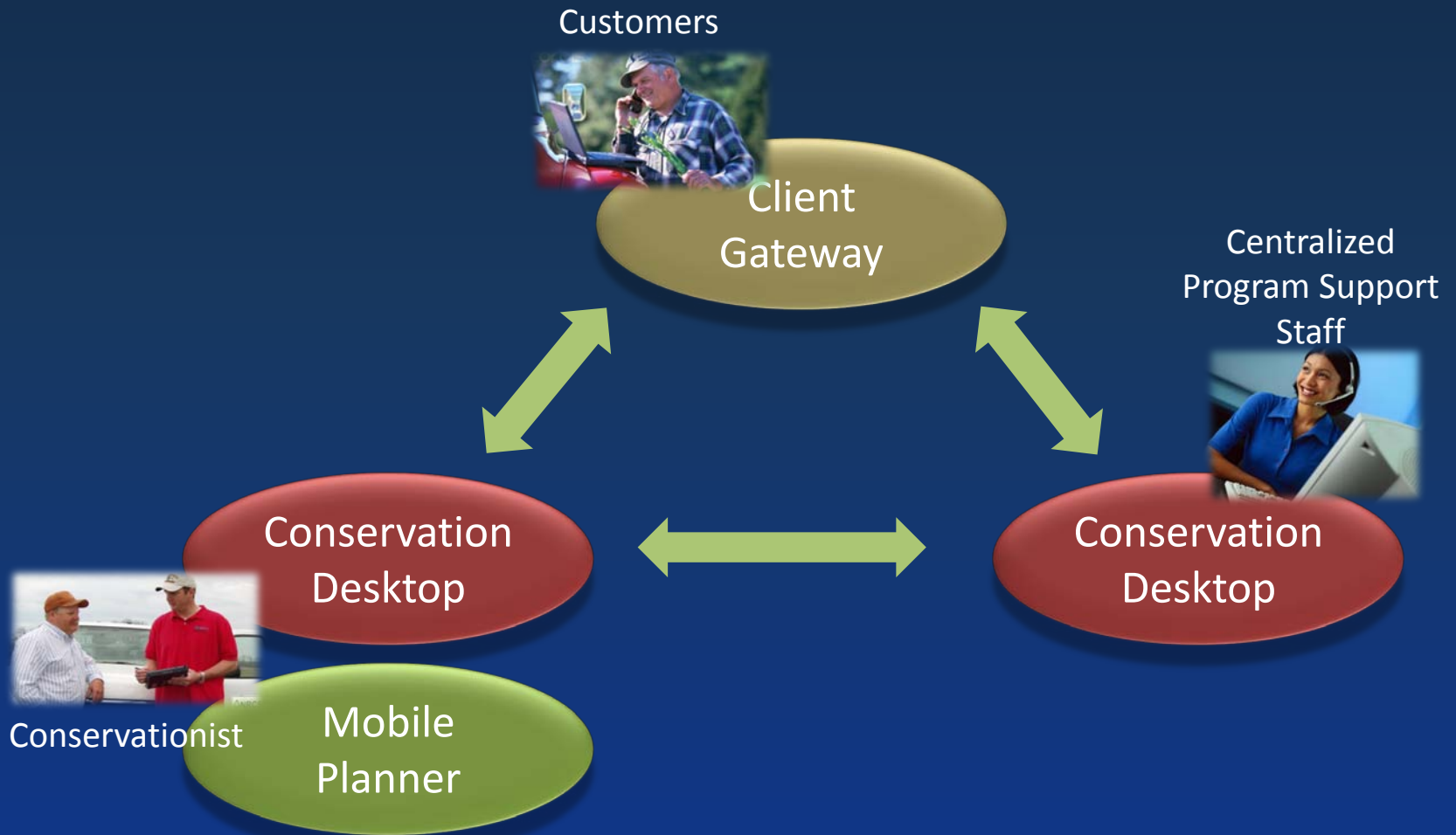
4. Alternative FA Staff & Approaches

5. Client Focused Products & Services

Web-based
Client Gateway

Redesigned
Info. Products

Streamlined business processes will be supported by a much more integrated set of IT tools.



The Client Gateway – NRCS clients will have the option to work through a web-based portal at their convenience 24/7 to ...



E-sign plans and contracts

Check status of payments expected

View their plans and contracts

Apply for NRCS programs and assistance

Identify their goals or problem areas

Schedule appointments

Check on program eligibility issues

Ask either technical or FA program questions

View soils & other natural resource information

The Mobile Planner– NRCS planners will have access in the field to all the data and tools they need to ...



Document progress with photographs

Certify applied practices

View plans and contracts

Request additional assistance

View & analyze resource information

View environmental outcomes

Define fields to meet client needs

Evaluate concerns and alternatives

Plan and schedule practices

Rank FA applications

Sign plans and contracts

The Conservation Desktop for Planners – NRCS planners will have a single web-based tool to ...



Conduct quality assurance

Streamline NEPA and other compliance documentation

Tract Number	Land Use	Practice	Narrative	Planned Area	Unit	Month	Year	Applied Area	Applied Date	Program
830	10	328	00N	1.3	ac	08	2007	1.3	05/30/2007	CRP
830	10	329	00N	1.3	ac	08	2007	1.3	05/30/2007	CRP
830	10	410	00N	1	ac	09	2007	1	05/30/2007	CRP
830	10	412	00N	1.3	ac	09	2007	1.3	05/30/2007	CRP
830	10	606	00N	515	#	09	2007	515	05/30/2007	CRP
830	10	620	00N	850	#	09	2007	850	05/30/2007	CRP

Schedule tasks and manage workload

View and manage clients technical and financial program information

Prepare final plan documents and maps

Automatically link data between science-based tools

Track performance

Access tools to design practices

Access tools to estimate outcomes

The Conservation Desktop for FA Support – NRCS programs support specialists will have streamlined tools to ...



Process contract status reviews

Process payments

Prepare correspondence to assist clients

Support participant with contract progress information

Obtain participant signatures

Complete FA document reviews

Develop contracts

Assist participants with Signatory Authority, POA, payment Assignments, etc.

Assist participants with eligibility determinations

Manage requests for assistance

Key Touchpoints: CDSI and Standardized Documents Team

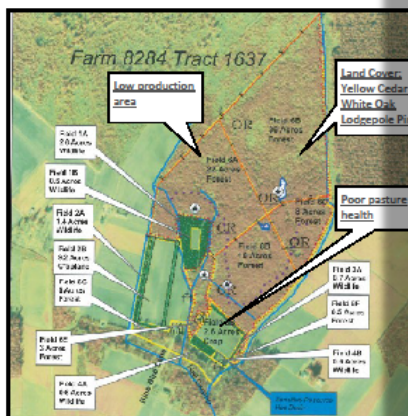
CDSI Planning Processes

- Resource Concerns & Planning Criteria (screening & assessment) integrated into planning tools and processes. Streamlined set of RCs.
- Full integration of geospatial data and services (analysis, auto-population, screening, etc.)
- Elimination of CSGs – integration of modeled outcomes (starting with CEAP/APEX for N, P, sediment, pesticides)
- Redesigned, standardized Conservation information products (maps, plan documents, job sheets, RC information sheets, SEC guides, etc.)

Redesigned Product Line



Client Request Overview—Proposed



- Client Objectives:**
- To increase herd size and health.
 - To increase profit.
 - Improve wildlife habitat.

- Problems:**
- Not enough grass to feed my cows throughout the year.
 - Cows don't have access to water in field 4.
 - Poor production of marketable wood.

Did you know?

- Your farm is in a NRCS' Sage Grouse Landscape Initiative Geographic Priority Area. The sage grouse, a ground-dwelling bird native to the sagebrush ecosystem of the American West, has experienced a significant decline in population over several decades.
- NRCS Farm Bill conservation programs, including the Environmental Quality Incentives Program (EQIP) and the Wildlife Habitat Incentives Program (WHIP), are helping ranchers improve habitat for the sage grouse. The core NRCS conservation practice for SGI is 645 - Upland Wildlife Habitat Management.

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Planner: District Conservationist Dave

Collected: 8/11/2011

Produced: 8/14/2011



Resource Inventory Summary

Name: John and Jane Farmer
Business Name: Rainer Farms
Address: 4407 Bland Rd, Raleigh, NC 27609
Home Phone: 919-873-2191
Office Phone: 919-872-5432
Mobile Phone: 919-873-2109
Email: John_Farmer@yahoo.com

Client Objectives:

- To increase herd size and health.
- To increase profit.
- Improve wildlife habitat.

Problems:

- Not enough grass to feed my cows throughout the year.
- Cows don't have access to water in field 4.
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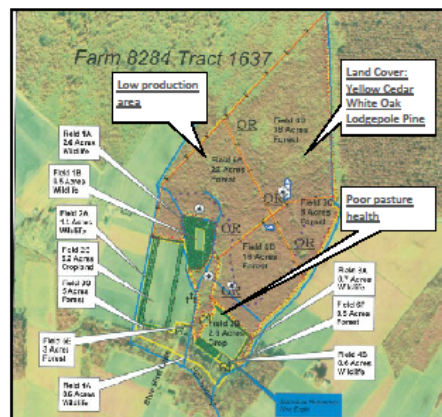
Additional Notes:

- Client expressed interest in NRCS Financial Assistance Programs (specifically EQIP).
- Provided client information about the Client Gateway.

Benchmark Conditions Summary:

Field Number	Resource Concern Type	Category	Description	Resource Concern Summary Rating
1	Livestock Production Limitation	Inadequate feed and forage	Feed and forage quality or quantity is inadequate for nutritional needs and production goals of the kinds and classes of livestock.	●
2	Livestock Production Limitation	Inadequate feed and forage	Same as above.	●
3	Livestock Production Limitation	Inadequate feed and forage	Same as above.	●
1, 2, 4	Livestock Production Limitation	Inadequate livestock water	Quantity, quality, and/or distribution of drinking water are insufficient to maintain health or production goals for the kinds and classes of livestock.	●
6A, 6B	Degraded Plant Condition	Inadequate structure and composition	Plant communities have insufficient composition and structure to achieve ecological functions and management objectives.	●

- = Is not a resource concern or client objective
- = Is a resource concern or client objective and in slight state of degradation
- = Is a resource concern or client objective and in moderate state of degradation
- = Is a resource concern or client objective and in severe state of degradation



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CDSI Database Strategies

- One technical plan for any PLU. Digitized PLUs and practices. Standardized inventory features, symbology, etc.
- Enterprise data used across tools (NPAD, LMOD)
- Redesigned land use and land cover taxonomy to link planning to other external data, crop reporting, environmental models
- Results from assessment tools and worksheets stored with land.
- Integration of photographic documentation.
- Integrated linkage to all FOTG documents, soils, other resource data
- Future transition of products (e.g. job sheets, practice standards) from static documents to a database format
- FA ranking integrated with planning process

Financial Assistance Ranking Model

Distance to water



Leaching potential



Soil flooding potential



Select/Rank Legend

State: Kansas

County: SALINE

Program and Ranking Criteria: EQIP - Water Quality

Admin. Service Center: (Select SCA)

Historically Underserved: (Select Historically Underserved)

ProTracts #	Year	App #
74621S	10	

User: _____

Clear Selection Run Ranking

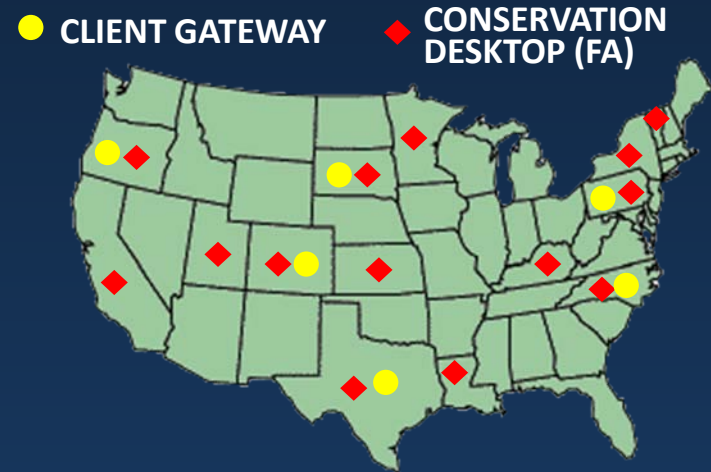
BOIP 2010 Geospatial Data Report
 EQIP - Water Quality
 Application Number: 74621S10
 Location: Saline, Kansas
 Number of Fields Processed: 3
 Total Report Acres: 146.7
 Report Date: Feb 15 2011 4:00PM
 Run by: _____
 Legal: S33-7135-02W
 CGI Version: 1.000.030

1a	NO	A HIGH nitrate leaching potential exists for greater than or equal to 50.0 percent of the unit of concern. (480 points)	High soil leaching potential: Acres - 0.0 Percent - 0.0
1b	NO	A combination of MEDIUM and/or HIGH nitrate leaching potential exists for greater than or equal to 50.0 percent of the unit of concern. (250 Points)	Medium soil leaching potential: Acres - 51.0 Percent - 31.2
2a	NO	PSLI of HIGH exists for greater than or equal to 50.0 percent of the unit of concern. (480 points)	Potential Soil Loss Index (PSLI): Acres - 0.0 Percent - 0.0
2b	NO	A combination of MEDIUM and/or HIGH PSLI exists for greater than or equal to 50.0 percent of the unit of concern. (250 Points)	High and/or Medium Potential Soil Loss Index (PSLI): Acres - 0.0 Percent - 0.0
3a	NO	Greater than or equal to 50.0 percent of the unit of concern is located within a Kansas Department of Health and Environment (KDHE) identified high priority Total Maximum Daily Load (TMDL) watershed for eutrophication, dissolved oxygen, nutrients, and/or pesticides AND is targeted to meet the Environmental Protection Agency (EPA) Geographic Plan to improve water quality nationwide by 2012. (30 Points)	

CDSI Technology Strategies

- Mobile tools (disconnect versus wireless)
- S&T portfolio integration with CDSI (shared databases, geospatial and analytical services) – started with RUSLE/WEPS and grazing
- Shift focus from practice narratives to Practice Design sheets (job sheets) for all practices
- National document storage technology for TA and FA
- Shared Services and Standards/Conventions (UI)
- Cloud services, OMS, SOA
- Better support for external development, TSPs

2012-2013 Timeline



Jan – Mar 2012 The Client Gateway and the Conservation Desktop (FA Programs support) will be pilot tested in selected sites in 15 states.

Mid-2012 Nationwide release of centralized document storage
Pilot testing of mobile planning technologies

In Sept 2012 Nation-wide release of the Client Gateway and full Conservation Desktop (technical & financial assistance)

During 2013 Nationwide release of Mobile Planner
Significant new functionality to the Client Gateway and Desktop, including environmental outcomes for each plan