

A Working Session #3 for Watershed Water Quality Task Force Sub-committee #3
Iowa Association of Municipal Utilities, 1735 NE 70th Ave., Ankeny, Iowa,
9:00 A.M. - 4:15 P.M. – Sept 12, 2007

Attending:

Roger Wolf, Iowa Soybean Association
Jim Boyt, Iowa Association of Business and Industry
Jane Reissen, IAMU
Elizabeth Hamilton, Iowa Corn Growers Association
Linda Kinman, DMWW
Jeff Schnell, Iowa Pork Producers Association
Bill Ehm, IDNR
Linda Kinman, DMWW
Gary Edwards, ICGA
Mary Gillaspey, MWA
All speakers listed below

Iowa Soybean Association Staff: Kathie Vierling, Victoria Carver, Todd Sutphin, Anthony Seeman

9:00 a.m Welcome, Introductions and Review Agenda

Roger asked individuals to introduce themselves, then introduced the purpose of the sub-committee and read the legislature's charge. After reviewing the other meeting reports from this group, we concluded that there was a significant piece of information missing: water monitoring. Victoria will transcribe our session and recommendations today, and tomorrow we'll compose our report. Even though there is much we could recommend that would be helpful in many areas, we do want to focus some of our recommendations on what the legislature can do to advance water quality.

9:15 – 11:00 Monitoring and Measurements for watershed water quality performance
Mary Skopec, Iowa Department of Natural Resources
Keith Shilling, Iowa Geological Survey Bureau
Chris Jones, Des Moines Water Works

Skopec: In 2000, the GAO said we, as a nation, have inconsistent, incomplete, sometimes inaccurate, and disintegrated water monitoring upon which to base policy and practices. The General assembly in Iowa began to address this in 1998.

Need to ask questions before you set up water monitoring; must know what you're asking in order to design and capture the information appropriately.

The most important reasons for water monitoring are:

- determining status and analyzing trends
- fate and transport
- determining hot spots

- etc.

Types of monitoring:

- census—monitor all bodies, not really possible
- reconnaissance—more cursory monitoring
- targeted—focusing on a specific location, specific questions
- research—used to answer specific research questions

Random or probability based monitoring—EPA likes it because you can use a statistically valid sample to project assumptions for whole state. They are now incentivizing this sort of monitoring in all states by withdrawing funding from states that don't do this type of monitoring. However, you only get a few samples from a site, so don't get much detailed information on a site-specific basis.

Sampling is designed to resource characteristics, system variability, scale.

Bates' Continuum of Monitoring Data Use: Education/awareness and problem ID, local decisions, assess impairment, legal/regulatory
Along this continuum, increase time, rigor, QA, and expense.

Purpose of state water quality monitoring programs:

- CWA requirements
 - status and condition reports
 - trend reports
 - impairment determination
 - “comprehensive monitoring/assessment”
 - state specific information for standards
- Provide information on state/federal program effectiveness
- Education & stewardship

EPA requires 10 elements:

- strategy
- objectives
- design
- core indicators of WQ
- QA
- data management
- data analysis
- reporting
- program evaluation
- general support and infrastructure

Iowa's water quality is variable; all Iowa water bodies shouldn't look the same and can't. We need to be reasonable about that.

Stream Monitoring 2000–2006 reveals different issues in different parts of the state. Long term monitoring is essential for seeing trends and results. Example: since 1986, not much change in N.

Iowa's program priorities:

Very High: Resource—interior rivers; (???)missed the rest)

Our interior rivers are now being monitored on a reconnaissance or synoptic bases. Get a general view. We're working with USGS on this.

Biological monitoring is one of our major charges; this is done on a random basis. Try to integrate water chemistry and physical habitat and check fish tissue and sediment contamination. Stakeholders are calling for more fish tissue sampling, though we're not finding anything significant there. We'll likely need to increase that.

Lake monitoring: In the past, have done census monitoring, but now definitions have changed, and we can't monitor every water body included, so we need to define and prioritize where we will monitor.

Ground water monitoring: checking 150 municipal wells, monitor annually, and check water levels in aquifers.

Beach monitoring: weekly using a census approach for 37 beaches, but now are adding other water resource areas, so will have to prioritize.

Wetland monitoring: Haven't begun this yet, but as restoration wetlands are added, we need to monitor whether they are effective in achieving their purpose and also monitor their water quality.

Community-based water monitoring (IOWATER), has gone on for 7 years, and we've trained over 3,000 volunteers. Over 20,000 data assessments have been submitted online. 97 counties have sites, and there are 3,500 sites registered online.

Question for Skopec from Ehm: I know you've only had one bump in funding for this, so have these added tasks taken away from your original plan?

Skopec: Definitely. We've also lost due to inflation, for example in fuel costs. We've had to cut way back on groundwater monitoring, and we've not been able to add interior rivers. We have improved some lab efficiencies, but we're at about half of where we put the plan. We're doing half the beach monitoring, as well.

Schilling: How do you design water monitoring? Use Raccoon River as an example

1. Target a basin

- collect baseline data (used ACWA monitoring data for Raccoon to illustrate)
- use existing data from the ambient sampling network, identify where concentrations of pollutant are high
- build a model from the data and use results to identify specific HUC12s
- determine size of basin to target—easier to detect change in smaller watershed in a reasonable timeframe, so might want to select HUC12, usually about 62 sq. mi. or smaller, such as Walnut Creek (20 sq. mi.) and Squaw Creek—in those two cases, over 10 years, we were able to see changes much more dramatically in micro-watersheds where changes in land management took place (prairie reconstruction

2. Time Frame

- What are the goals and objectives? What are you trying to measure—establish realistic expectations
- Important to understand travel time in a watershed: mean time, over 10 years—maximum was 308 years
- conclusion: There is proportionality between travel time of groundwater beneath restored prairie flowing to streams and N level.

3. Design sampling

- consider common schemes: before/after, upstream/downstream, paired watershed, gradual change (most common)—time needed will relate to which is used
- consider pre-BMP monitoring that needs to be done
- account for effects of climate variability
- Example: Walnut Creek project used various monitoring approaches, making it more robust and useful
- consider tile drainage in designing monitoring
- sampling parameters: would like to see more discharge monitoring, identify pollutants of concern, additional parameters may help explain concentration patterns or provide surrogates, continuous real-time monitoring (this is powerful and will provide a lot of interesting information)
- sampling frequency and duration: need to understand the pollutants, how and when they're transported—for example, since
 1. Nitrates: normal distribution, fixed interval sampling may work, but because it moves slowly, will take a long time to see changes
 2. Bacteria: Concentrations follow logarithmic distribution, so event-based + fixed sampling may be best, temporal correlation may exist up to four days (beyond that, it's random), and implementation of BMPs may result in more rapid reductions
 3. Sediment: flashy transport, difference sources, historical storage—because of historical storage and different sources, a model may indicate significant sediment savings, but in practice, won't even show up over 10 years

4. Data Assessment and Reevaluation

Question from Carver: for clarification on the conclusion about model projections vs. monitoring results. Answer: models will show you a significant savings of sediment or lower nitrates after BMPs installed, but actual monitoring reveals no or little change. This is due to historical remnants, variable sources, and so on.

Question from Wolf: Do we have much water monitoring designed in the ways you've described?

Schilling: No. Don't have the funding or time commitment. So, we aren't really evaluating our conservation program effectiveness.

Skopec pointed out the usual 3-year duration of programs, which is not sufficient.

Jones: DMWW is a company owned by the City of Des Moines. Now operates on a 50-mile radius around DM. Now constructing a third processing plant on the Des Moines River, primarily to serve Ankeny.

Currently, we primarily use an infiltration system, built in stages over a 50-year period. Such a system could not be built today, due to costs. Intake from the Raccoon and Des Moines Rivers were added later to increase capacity. Six radial collector wells under influence of the Raccoon were installed. This provides most of the water at the Maffitt plant.

DMWW has one of the most extensive and intensive water monitoring operations, due to the condition of our source water.

Categories of monitoring (several elements under each):

4. Source water
5. Process water
6. Finished water
7. Distribution water
8. Watershed

History of drinking water quality:

1912: hard, N <1 mg/l, pH 7.2

1947: soft, N <1 mg/l, pH 9.92

1974: moderate, N 3.3 m/l

Now, moderate, N 5.9 m/l

Jones reported on the history of contaminants and water quality in DM. We really never had an issue with N until 1979. Rapid N concentration increases in source waters came between 1965 and 1986. Average concentration has doubled in the last 30 years. Therefore, we have the world's largest ion exchange nitrate removal facility, which operates on an average of 50 days per year. This drops off in the late summer, when N concentration diminishes.

Today, considering Watershed Monitoring, which is only a small piece of our monitoring.

DMWW's obligation to customers:

- keep water clean
- make it safe
- prove it's clean and safe

DMWW's role in WS management:

- Source water and risk assessment
- public awareness of water quality issues
- monitoring
- facilitate DNR activities
- conduct research
- help implement change; give strategies credibility (such as we do with Iowa Soybean Association)

Potential Roles for Water Utilities:

- Cage rattler
- Leader within the environmental community (this relationship hasn't been strong over the years, partly because utilities want to sell a lot of water, and enviros are against that)
- Property owner (NYC has purchased all land in watershed, not practical for DM)

- No role (this is the temptation)

DMWW has worked with ACWA to monitor Raccoon River watershed streams over several years (grab samples taken twice monthly, April-August, bacteria and N; event-triggered monitoring in Buttrick; with USGS, continuous N-monitoring in Van Meter).

Question for the utility is whether its future is convergent with or divergent from the watershed—is the answer just to treat the pollutant?

Challenges:

Jones:

- Cultural—need to address the culture to see why things are the way they are—society accepts the current condition or feels hopeless to change it
- Radical changes in agriculture—We buy into what ISA is doing to advance agriculture's environmental performance, but I'm wondering if we need more dramatic changes
- Small town Iowa: what is the future?—we need to make progress with waste treatment in small towns and rural areas—do we invest in that or let the towns die?

Recommendations:

Schilling (offered by speaker or distilled from his presentation):

1. Focus on small sub-basins where changes are detectable in a reasonable time frame and results can be used to encourage changes in practices
2. understand and accept that both monitoring for appropriate baseline data and to detect effects of management practices takes many years and will not match the model projections
3. take the time and do the groundwork to design water monitoring to suit needs and purposes of the watershed

Jones: Anecdotal observations don't make good policy, and we can't manage an environmental system without data. Therefore, we need

11:00 – 11:15 Break

11:15 – 12:00 Forming Alliances and forging common vision and mission for community-based watersheds

Tina Mowery Hadden, Mowery Strategies

Wolf: Introduced Mowry, who was asked to be here at the suggestion of one of our members to inform us about how she uses meeting facilitation and coalition-building skills to help advance conservation solutions.

Mowery:

I come to the table with psychology, journalism, and political science backgrounds to help form alliances of different kinds and help allies arrive at and advance a common vision. *Growing Green Communities* is a key project I've worked on.

Why form alliances?

- address an urgent issue
- plan/launch community-wide initiatives

- create long-term, permanent social change
- easier to spread the word if there are multiple channels sending the same message
- pool resources
- keep one another enthusiastic when the opponent strikes

Barriers to alliance forming:

- turf protection
- bad history
- funding
- fear of the unknown
- easier to keep doing it the way we always have
- too much red tape
- not the right spokesperson (“People buy into the leader before they buy into the vision.”)
need the right person at the table, whom others see as a trustworthy, easy person to work with – then need to select the right spokesperson for the alliance

Mowry went over steps in forming an alliance, including getting the right members and then giving each one something to do. Then, meet frequently enough to process and respond to the work of each meeting and capture everyone’s “aha” moment, then to monitor progress and re-invigorate members. Create a vision, and action plan for each member, and a timeline and expectations for each interval between meetings. Determine if a professional staff is needed.

Resources required:

1. Time, passion, and patience
2. Possibly professional staff:
 - facilitator (\$50-150/hour)
 - fundraisers (lean on members)—others want to see you have “skin in the game”
 - Marketing/media relations (\$50-100/hr)
 - Research (\$25-50/hr)

Role of facilitator:

- two kinds: biased or vested interest
- provide guidance in the discussion
- ask difficult questions
- make sure everyone participates
- serve as a sounding board
- reiterate what has been said
- assist in molding the vision from all input
- develop action steps and who owns each one
- hold people accountable (either by attaching names to duties or serving as the project manager)

Growing Green Communities example:

Goal: to Educate Decision-makers and stakeholders in the choices over which they have jurisdiction

Approach:

- Create core teams
- conduct educational seminars
- include Green Infrastructure in each community's core plans
- ???

Planning premise for all three watersheds:

- control development on slopes greater than 15%
- coordinate park and trail planning with utility easements along stream corridors
- limit development in floodplains

Gave some examples of Growing Green Communities project.

Successes and influences:

- Polk Co. comp plan
- Pleasant Hill City Hall
- Runnells residential development
- Altoona Library bioswale
- SE Polk HS
- MWA
- Thomas Mitchell Park

Mowry gave more examples from communities in the alliance that have implemented green development requirements and other regulations based on the work of the alliance. She also noted the need for public education to get broad buy-in to these new concepts. She gave another example of a city with lots of internal conflict that was able to find one concept on which they agreed and generated a project for that.

Wolf: Over lunch, I'd like to talk about some of the standards and principles that

Mowry: the most important point I want to leave with you—the general public doesn't understand one thing you're trying to do with watersheds, and we don't begin to have enough money to educate them.

Recommendations for state support:

1. contract with and/or train facilitators to do the work in the communities
2. create watershed districts
3. implement incentives for watershed planning/protection (big carrots)

12:00 1:00 Lunch

1:00– 1:45 Iowa Municipalities: Issues and Ideas for Performance-Driven Watershed Management

Pat Sauer, Iowa Association of Municipal Utilities

1. Brief summary of MS-r and GP#2 storm water permit requirements

Gave quotes from Leopold on seeing land as community and striving, rather than expecting to achieve absolute harmony.

CWA of 1972 addressed point and non-point source pollution

1987 brought amendments

Phase I required NPDES Stormwater Program permits

Phase II—where we are right now, effective March 10, 2003—added categories of industry, MS-4 cities and universities, and smaller areas of development

Requires 6 minimum control measures: construction site erosion, illicit discharge, and ??

Cities required to do maximum extent practicable (MEP)

Cities need to develop a post construction ordinance and have a watershed plan

Enforcement done by EPA, DNR, and the 43 MS-4 cities

Iowa Policy Project Paper gives an overview of what's being done.

2. components of urban watershed assessment and watershed land use plan

- identify watersheds and water bodies
- ID watershed partners
- ID concerns and opportunities
- gather data, inventory resources, and analyze
- develop priorities and practices to implement

Urban watershed land use considerations

- development changes hydrology from infiltration-based to runoff-based
- post-construction storm-water runoff

3. Where can we make a difference?

What BMPs can be used to improve the watershed, water quality and quantity?

Most effective locations for intervention?

Low Impact Development (LID)

- comprehensive land planning and engineering design approach
- 3 categories of development
 - residential streets and parking lots
 - lot development
 - conservation of existing green areas

Can use structural or treatment BMPs and non-structural

Establish watershed goals to build a plan

Sample list of goals:

- water quality
- water quantity

- stream bank and buffer
- flood plan
- public use
- ???

Issues and challenges:

- most population in Iowa is in cities, but our focus is usually on agricultural watersheds
- haven't thought about and not much guidance for urban watersheds and plan
- what are IDNR expectations for permit requirements?
- enforcement needed
- what is maximum extent practicable for IA
- only state in Region VII with WA and LUP requirements in permit, no 319 funds for watershed projects in IA MS-4 cities
- watershed projects need more funding to develop strong urban watershed plans and to account for the ag-urban nature of our watersheds, which reach out beyond the cities into the ag areas
- Iowa cities are having to start from scratch to build watershed plans, need to learn from others outside Iowa who have done urban watershed plans—e.g., some states allow watershed districts to levy taxes to meet funding needs for watersheds

How are challenges being met?

- ?
- ?
- ?
- resources for cities—Iowa Stormwater Education Program
 - resources and networking
 - education and outreach
 - creating models
 - uniform themes for public education
 - working to expand membership
 - Urban Watershed Assessment workshops
 -

Recommendations:

1. need one common vision for state
2. what is the value of watershed management in Iowa?
3. statewide hierarchy and support network needed
4. How to bring city, county, conservation districts, grassroots groups together
5. overcome turf battles among groups doing watershed work right now
6. build bridges between ag and urban communities
7. be prepared to spend money, learn from other states how they are getting funds
8. prioritize the proliferation of watershed activities
9. develop a watershed fitness program:

- a. funding
- b. incentives, implementing, innovative
- c. talking
- d. networking
- e. educating
- f. strategizing
- g. success

Question: anything that can be done for roof runoff?

Sauer: many things. proceeded to list several.

Question from Wolf: Referred to Sauer's comments on the need for regulation. Any thoughts on how we can mix the regulated and non-regulated constituencies in addressing watershed issues together within watersheds.

Answer: I do think cities need to be regulated, for the most part, in order to do any of these things. Some cities are doing some things for other reasons, but those usually include some incentives, such as local economic development.

Discussion followed about efforts in other states and communities to balance regulatory and non-regulatory interests and approaches. Wolf thinks economic development will be the common interest and driver for such alliance and for implementing working watershed plans.

Wolf asked if the cities could work with agriculture out of the storm water fund to help support the expense of a functioning watershed plan?

Sauer thinks it's possible. We haven't done that yet, and we need to sit down together.

Question and discussion about the role of detention basins in becoming sources of contamination.

Question about Phase III. EPA is considering numeric standards for solids, but it's on the back burner right now.

1:45 -2:30 Intergovernmental Arrangements and Jurisdictional Infrastructure for Watersheds

Steve Anderson, *Clean Water Alliance – Dickinson County*

Steve: coordinator of the clean water alliance

Location: NW Iowa on MN border, 10 municipalities (8 adjacent to the lake)

- smallest county—15k acres of water, 15k acres of public land
- Normal population of 16k, grows to 120k over July 4th
- water quality some of the best in the state
- economy depends on water quality
- lakes are also primary drinking water source

- over 1million tourists per year, \$131million from tourism annually, greater income producer than agriculture in the county
- only non-metro county experiencing population growth
- urban areas have grown 30% in area from 2004-2006
- W. Okoboji shore lakefront property sells for \$1200/linear foot.
- fisheries—Big Spirit generates over \$2million income annually
- 70% of county's property taxes in county from lake-front property (?)

Past work—ag conservation, now working on urban conservation

How is the Alliance structured? Funded?

- over 50 organizations, both Iowa and Minnesota
- no membership or dues
- takes no stand on issues, only provides information and asks questions (in order to maintain credibility)
- Goals—coordinate, communicate, educate; support goals of member organizations dealing with water quality protection and enhancement (have already accomplished most of first 10-year plan, now at EPA recommendation, about half-way through RWA)
- brings groups together to resolve issues (e.g., 9 municipalities)
- get facts and disseminates information
- assist with local policy through education

Lake Associations are key to achieving progress. Six Okoboji Lake associations represent joint membership of over 1,000 people. Oldest of these founded in 1905.

Active SWCD is also invaluable. Have done ag-urban projects. Bill Northey is a former Commissioner.

Water Quality Commission is a local funding source with 18 members. They provide local match for grants and support Steve's office. Started with Citizens Concerned for Water Quality—began by starting to create a watershed district, so they could levy for funding. Had to be approved by county board of supervisors, but lake front property owners objected, as they were going to be assessed the highest and didn't think they were the only ones benefiting from clean water. True. Ag property taxes in Dickenson County much less than surrounding counties because of the contribution of lake front property taxes and others related to lake income generation. Instead of creating Watershed District, set up a 28-E agreement. Approved by all 10 communities and county. Drawn up to prevent double-taxing of city residents for same entity.

Allocated funding: yr 1-\$100k; remaining 8 years \$200k

Agreement to end after 9 years

automatically renews

leverages \$3:1 from outside funding

funds can only be used within watersheds of Dickenson County lakes

Goal for 9 years: \$1.7mil local, 5.i match, total \$6.8

To date, 7 years: \$1mil local, \$7mill fed/state match, total \$8million

Revised estimate for 9 yrs: \$1.4mill local, \$9.8mill match, \$13.7mill.

Projects

Data collection

- \$170k

- IR mapping
- LiDAR data
- watershed assessments
- water monitoring

New Ag Programs

- \$10k
- alternative intake for farm tiles to lower phosphorus levels in water
- NRCS now writing standard for practice, then will be able to cost-share all over Iowa

Urban Education

- LID
- Smart Growth
- urban conservation projects

In Minnesota, they spend 3-5 years doing baseline monitoring, create a plan from their data, and then have a better way to show results, which we don't have.

Challenges:

- working with multiple political entities represented within watershed covering two states—creates much extra work and obstacles in trying to address watershed issues, where hydrologic boundaries don't follow political boundaries
- getting consistent funds for water quality—Water Quality Commission in Dickenson County was formed in response to this challenge
- Watershed projects funded for 3-5 years give staff just enough time to get established in the community and be trained and trusted, then they're gone. Some of this is due to the low pay in Iowa for these positions, too. We lose good staff to MN.
- Adequate public education that really reached people effectively hasn't been there until recently. Then the public thinks nothing is happening and doesn't support funding.

Recommendations:

1. Improve salaries and consistent support for watershed staffing, monitoring, and planning in order to get the traction and time needed to achieve results
2. Conduct 3-5 years of baseline monitoring in watersheds, the way MN does, to inform our watershed plans.
3. Improve funding and effectiveness for public education.
4. Pass legislation to permit use of soy-based alternative to phosphorous/fertilizer for lawns (??).
5. Develop and energize SWCDs around the state to be as effective as the one in Dickenson County.
6. find solution to watersheds needing to work with multiple political units that they overlie

2:30 – 2:45 Break

2:45 – 3:30 Technical Assistance and Incentives for Watershed Management

Duane Sand, Iowa Natural Heritage Foundation and Chair, State Soil Conservation Committee

Duane:

Main delivery systems for funding the initiative your goals encompass —

1. SWCD
2. IDALS State Soil Conservation Committee
3. USDA NRCS

(DNR not represented in those)

Performance and non-regulatory are both affirmed by all of this above, though not always strong on the details of how that works out

“Flexibility” is the most difficult charge—if you want to see much flexibility, you may need to completely rebuild the whole structure.

Key Questions:

1. What are the main forms and sources of technical assistance and incentives available currently for watershed management? Who is providing assistance?

Main forms are:

- Watershed grants
- Cost-share to land owners
- Free technical assistance

Iowa has been good to create authorities for self-help taxing, such as 28-E, watershed districts, storm water utilities, tax increment financing districts, and others

There are a whole range of options most people don't think about that involves fees or taxes
There are about 3,000 drainage districts in Iowa, and we haven't put a lot of resources into them, but they could be a tool for doing watershed-water quality work.

There are watershed protection fund grants, leveraging 319 funds. Also WIRB and watershed planning grants. Also a number of USDA Conservation programs.

Division of Soil Conservation also has REAP money to help fund watershed staff and some grant-funded projects.

Don't overlook the ability to issue tax-exempt bonds: much drainage infrastructure has been built this way in the past.

2. Who is eligible for assistance? How do they access it?

Primarily land owners and watershed groups.

3. What are the impediments for achieving more cost effective and higher performance from current efforts?

Institutional impediments:

- most funding is for projects, but little assistance for creating and implementing plans—they are program driven rather than plan driven
- performance is seldom measured against quantifiable environmental goals and priorities
- resources are often focused on structural conservation practices, not agronomic practices and sustainable ag systems
- resources focused on disciplined delivery of incentives and approved TA, rather than profit-motivated conservation practices and innovative technologies
- the system rewards the repetitive use of established programs and practices, rather than cutting edge leadership, creativity, and new organizing strategies

- programs that drive the system result in addicting stakeholders to other people's money (OPM); wealthy individuals and communities wait for the state or federal assistance rather than take personal/community responsibility

Recommendations:

1. greatly expand the use of Iowa's Clean Water State Revolving Fund (SRF) for non-point source pollution prevention loans—should be supported by state appropriations, like cost-sharing and competitive grants
2. DNR/EPC should partner with the Division of Soil Conservation for maximum leverage of federal Safe Drinking Water SRF grants to assist watershed projects that enable water utilities to comply with EPA groundwater and enhanced surface water treatment rules
3. Amend the Code of Iowa to update the authorities and funding limits of local special taxing districts (drainage, levee, flood, response, watershed, storm water, water quality, recreational lakes) to increase local capacity for watershed management. In Minnesota, drainage districts are given the ability and authority to address water quality issues, not just to move water quickly off the land. We need to update our code in that way, too.
4. Amend the Iowa Conservation Reserve Enhancement Program (CREP) to fund targeted drainage districts to implement comprehensive drainage water management plans that serve as pilot performance driven watershed projects.
5. The Secretary of Agriculture and the State Soil Conservation Committee should amend existing program rules and procedures to flexibly reward SWCDs wanting to implement their approved 5 year natural resources plans. This would help overcome the systemic problem of no rewards for planning. Such rewards should include:
 - a. priority access to district initiatives appropriations
 - b. greater flexibility in use of incentive funds for conservation
 - c. substitution or training of state staff to gain essential TA or management skills
6. Use state income tax credits to create alternatives to state appropriations to fund cost effective watershed management. for example, the ethanol industry is a good prospect for funding such programs with tax credits, in order to proactively address soil and water conservation issues before expanding into cellulosic ethanol.
7. Redirect Agricultural Land Property Tax Credit to improve and protect water quality and provide technical assistance to agricultural producers.

Discussion followed about moving away from cost share grants and toward loans, as current debt-to-asset ratio for agricultural land owners is the best it's been in 80? years. Some pointed out the possible need of differentiating out-of-state or urban landowners from farmer-

landowners. Kinman suggested requiring absentee landowners to implement conservation practices in order to receive government payments.

3:30 – 4:00 Rapid Watershed Assessment – Tool for Watershed Planning?

Jim Cooper, Prairie Rivers RC&D

Tom Isenhardt, Iowa State University

Key Questions:

1. What is a Rapid Watershed Assessment (RWA)?

Cooper: Prairie Rivers RC&D submitted a proposal 18 months ago to develop an RWA for 3 HUC-8s in their district and got the grant. Agree with earlier speakers that the system gives money to people and expects them to have a plan without having had adequate resources or tools to develop a plan and have an implementation strategy informed by data.

This RWA piggybacks on the Boone River watershed project.

Isenhardt: We also don't provide the technical training and tools to people who are needing to develop watershed plans. At ISU, we try to get those tools out, train students, and partner with the agencies to do that. In doing this RWA, we are creating the something new in Iowa.

In reference to the NRCS planning continuum, an RWA is moderate in scope and in level of detail—watershed plans are nested within it, and conservation plans within that.

Two phases to RWA

Phase 1—Watershed resource profile: document best physical, biological, sociological data, known resource concerns, social capital, known conservation progress

Phase 2—Assessment: current resource conditions, concerns, possibilities for mitigation, potential costs

2. What are its limitations? Advantages?

Limitations:

- cumulative effects
- infrastructure needs
- qualitative, not quantitative

Challenges:

- summaries of data available at county or local levels are not helpful, because not from areas coterminous with the watershed

Advantages:

- reasonably quick and inexpensive
- obtain landowner and stakeholder input
- targeting of watersheds for future

Question on level of participation from people in watershed? Depends on where folks are already organized and where other organizations are helping to get that input. In other areas, the local input is more difficult to get, so we're having to work with local SWCDs and others to try to get the local input.

Question on the cost of an RWA. We're doing each of the HUC-8s for about \$100k. Remember, this isn't a plan, it's an assessment, so you don't end up with a plan from this—you take the RWA and, from there, work at a smaller watershed scale to develop watershed plans (HUC-12).

Question about how they've gathered livestock census. That's been difficult in some areas. Some are being estimated based on location and size of buildings.

Question from Wolf—have you thought about what the state might be able to do to institutionalize RWAs for use in planning.

Question on time it takes to do an effective assessment—would they agree with earlier speaker who recommended Minnesota's practice of 3-5 years to collect baseline data and conduct thorough assessment? Cooper estimates they've already spent about that much time and \$1million informally.

3. What recommendations do you have for its use?

- report benchmark conditions
- estimates of conservation investments and costs
- help stakeholders set priorities
- help partnerships develop strategies to resolve resource concerns
- evaluate conservation implementation activities (?how?)
- resource for individuals and groups to obtain technical and financial information for conservation plans

Recommendations:

- make sure it's a "living plan" and that there are resources, incentives, and requirements to be sure it gets used and adapted, based on continuing input

4:00- 4:15 Review of other Subcommittee work

Bill Ehm—on Subcommittee #2

Circulated two handouts including a draft of their recommendations.

Linda Kinman—for Rick Robinson on Subcommittee #1

Also circulated a written report from her subcommittee, which subdivided into three sub-subcommittees.

4:15 Adjourn