

Partnerships and Public Connections in Solving Water Quality Issues in Camp Creek

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Newly constructed wetlands between Camp Creek and the Metro Waste Landfill.



Intent of this project

This project examines two aspects of the Camp Creek watershed:
 1.) The role of citizen involvement in watershed management, and
 2.) Civic structure (the public connections that exist for solving water quality issues)

Methodology

We conducted 10 in-depth interviews of farmers and citizens involved in the watershed (5 farmers, 2 Metro Waste Authority officials, an elected County Conservation Commissioner, a state water specialist and a representative from a not-for-profit environmental group involved with Camp Creek). The interviews lasted approximately 30-40 minutes, and were taped and transcribed verbatim.

The conceptual questions from this study were developed in relation to land use, water resource expectations and practices, farm practices and social relationships with others in the watershed.

Background of the Camp Creek Watershed

Over the past several decades, the Camp Creek watershed has received increasingly more attention in Polk County due to the growing suburban pressures that come with being located on the periphery of Des Moines (pop. 200,000) and the land use patterns that dot the landscape around the creek.

Running south along the border dividing Polk and Jasper County – from northwest of Mitchellville to directly east of Runnels, Iowa – the Camp Creek watershed takes up approximately 26,300 acres of land (Iowa DNR (a), 2005).

The Iowa Department of Natural Resources (I-DNR) lists Camp Creek on Iowa's 203 (d) list of impaired waters due to its "low diversity in the aquatic community." The Stressor Identification (SI) procedure used to identify causes for this impairment identified two primary causes for this low aquatic diversity in Camp Creek:

- 1.) Sedimentation, and
- 2.) Channelization.

Secondary causes for this impairment are listed as:

- 1.) Excess nutrients, and
- 2.) High turbidity.

(Iowa DNR (a), 2005)

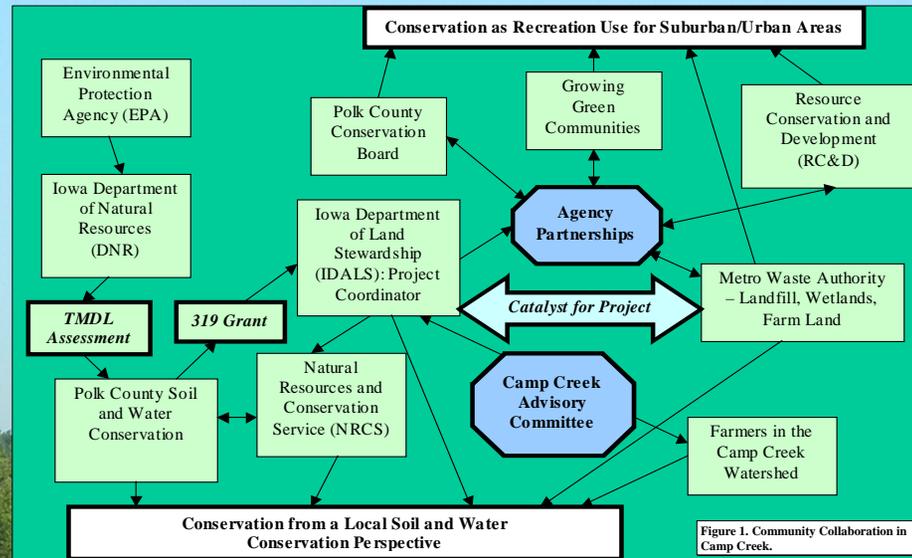


Figure 1. Community Collaboration in Camp Creek.



Severe stream bank erosion in Camp Creek.



Cattle access to Camp Creek and stream bank erosion.

Outcomes from Camp Creek Watershed Partnerships

- The total number of farmers who have signed up for conservation programs as a result of this project: 15 farmers (with a total of 40 conservation construction projects)
- The acres of buffer that have been put around Camp Creek: 19.2 acres

Projects Completed and Underway:

- Nutrient Management Plans: 843.5 acres planned for fiscal year 2007; 1100.6 acres completed for fiscal year 2006; 259 acres completed for fiscal year 2005
- Pasture Management Plans: 224 acres planned for fiscal year 2007; 205 acres completed for fiscal year 2006
- Water and Sediment Control Basins: 1 basin completed and another planned; 25% completed for year 2
- Stream buffers: Planned buffers for two farmers and Metro Waste Authority and 33 acres planned for Metro Waste Authority
- Grade Stabilization Structures: 4 planned; 75% complete for 3 year project
- Thomas Mitchell Park: Completed 250 feet of stream bank stabilization in the Fall of 2005; there are 3 pool and rifle structures planned for the Spring of 2006
- CREP site: There is a potential CREP wetland site planned that will intercept 878 acres of drainage and reduce nitrates into the stream.
- State conservation education grant: REAP funding with local matching dollars for a "Green Infrastructure Strategy Model" developed by an environmental not-for-profit group, 2005-2006 (Total project \$96,200)
- Farm Bureau education grant: \$2,500 in educational assistance

Goals for the Future:

- Possible partnership with the Department of Transportation (DOT) to mitigate stream bank stabilization in Camp Creek
- Partnership with Growing Green Communities to increase the education of city officials on "green growth" and "green infrastructure"
- Installation of a continuous stream buffer from I-80 to Highway 163 (this will be installed during the Spring of 2006)
- The installation of more grade stabilization structures and filter strips around the Creek
- Camp Creek being removed from the impaired waters list due to the conservation involvement of watershed residents and active community members

Camp Creek Partnerships: Community Collaboration

A number of agencies and groups (Figure 1) share conservation and water protection goals for Camp Creek. Over the past several years, these groups have come together to build a collaborative vision of what the watershed community wants Camp Creek to look like in the future.

"But it can be done. It's just a matter of making it a priority. And that's where the whole facilitating the process comes in, because it's not Growing Green Communities saying you should do it, it's not NRCS saying you should do it or the state saying you should do it or some other organization saying you should do it. It has become the community saying – you know what? We want our community to feel and look like this. And if we're going to have it feel and look like this, then we have to be very intentional about where development is going to go" (Not-for-Profit Group).

"Our goal would be to create a plan where we can all start to be a part of the solution. And that's where...working together as a watershed comes in – because you start to create some goals and guidelines for what you want your watershed to be like." (Not-for-Profit Group).

"So I went in there and we had a meeting. About 35 people attended, which is a high group. That's probably 10% or better. So I hired a professional facilitator to come in...I said, well, here's some things that we've noticed...pretty much they (the farmers) agreed, but they gave some input...at that meeting, we established what they did, what they thought were the issues. And then we went on and had a self-promoted advisory committee, which is about six people now and we met in January" (IDALS project coordinator).

"Actually for us personally, it's been surprisingly simple, and that's because of our involvement in that stewardship committee and (the IDALS project director's) involvement in that stewardship committee. When we first convened that Metro Waste Stewardship committee, we brought together, I think, the right players to the table. So from that point forward, some of this funding was not too difficult" (County Conservation Director).

"(The IDALS project coordinator has) had some community meetings, and he's awakened some people. I mean, you know, we don't want to have a bad creek" (Farmer).

"(My involvement) started through the Metro Waste Authority Stewardship Committee, and my desire was to make sure that, since we neighbor Camp Creek, that we were going to take a leadership role in making sure something positive happened in Camp Creek" (County Conservation Director).

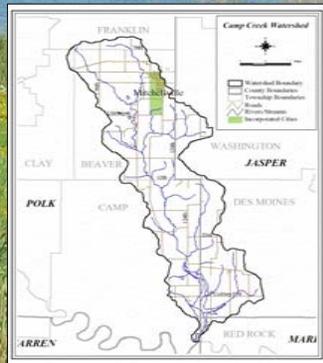
"We're really trying to take all these different funding sources, and make them as holistic as possible to improve the quality of water at Camp Creek. And we're one of many partners" (County Conservation Director).

"(Metro Waste Authority) is a landfill, and they are real conscientious about water quality, so they've been a good neighbor to us" (Farmer).

"We're building core teams in each community, so you get these groups from the city and businesses and others, and we're educating them" (Metro Waste Authority Official).

"...So in those conversations related to the stewardship effort of Camp Creek, we recognized that we had some opportunities to partner together...the project just started to mushroom from there, so I guess it would be fair to say that kicking around the idea of Camp Creek stabilization and doing something about Camp Creek with these AmeriCorps discovery volunteers was something that sort of stemmed from that Metro Waste Authority stewardship meetings and our desire to partner. And I'm sure that a couple other players here had some hand in it" (County Conservation Director).

Land Uses in Camp Creek
 The land uses in this watershed are predominately agricultural, with 69% of the watershed being used for row crop agriculture and 17% for pasture, cropland, and the Conservation Reserve Program (CRP). Other land uses in this watershed include: 8% for forests 4% for urban use, and Metro Waste Authority (a landfill in the area) owns approximately 2% of the land in the watershed, where it operates an active waste disposal site for the city of Des Moines (Iowa DNR (a), 2005).



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