CHAPTER 13

KEY CONCEPTS
1. Financial Resources
   Significant funds will be required to implement the first ten years of this effort. This chapter outlines the costs associated with this plan.

2. Staffing
   Personnel will be required in order to coordinate ongoing projects, review ongoing monitoring, prepare or support grant applications and monitor overall execution of the plan.

3. Improvements
   Total costs related to projects listed in Chapter 10 are summarized in this chapter.

4. Monitoring
   The monitoring program outlined in Chapter 12 will require resources to install and maintain the system. Additional time will be required to complete grab sample monitoring, pay for lab testing and staff or consultant time to compile and analyze results.

5. Maintenance
   Any physical improvement requires maintenance. But maintenance often fails to be completed if it is not properly accounted for in the budgeting process. It is important that local jurisdictions consider including such costs in their ongoing budgets.

6. Sources of financial support
   A variety of grant sources are available at multiple scales of government as well as through not-for-profits and other private concerns. A general consensus across Iowa remains, however, that expanded resources will be needed to effectively address water quality and flood mitigation in this watershed and in most watersheds in the state.

HOW DO THESE CONCEPTS INFLUENCE DEVELOPMENT OF THE PLAN?
This plan will fail to be completed if appropriate funds are not set aside for implementation, or if qualified, motivated personnel are not used to coordinate efforts, evaluate progress and advise when amendments to the plan are necessary.
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Resource Requirements
Costs

Financial support will be key to successful implementation of this plan. Staff support activities, construction of improvements, monitoring water quality and maintenance activities cannot be completed without dedicated funding.

Staffing

Staff time will be required to monitor execution of the plan, review monitoring data, coordinate or complete grant applications, work with consultants and report results to the Walnut Creek WMA board and public. This can be achieved by using existing staff time from the various member communities or hiring a project coordinator (or additional staff) to be dedicated to directing execution of this plan on behalf of the WMA.

At the time of this writing, area WMAs intend to collaborate in securing support through Polk SWCD through a dedicated coordinator. This coordinator should fulfill at least the following duties:

Administrative
- Coordinate meetings, perform administrative duties, provide leadership and support

Monitoring
- Oversee the monitoring program and support collecting results
- Report and share data with other groups conducting monitoring within this watershed

Education and Outreach
- Provide resources and technical assistance to stakeholders
- Work with rural landowners and producers to identify candidate locations for practices and implement them
- Communicate with city and county officials regarding completion of watershed goals and objectives

Implementation
- Assist or coordinate during the design, layout and construction oversight of practices

Ordinance Changes
- Review draft ordinance changes prepared by local communities or regional entities to develop more consistent language across multiple jurisdictions
- Support ordinance adoption

Funding acquisition
- Pursue funding opportunities to execute this plan as well as other practices as deemed beneficial

Report Progress
- Prepare annual reports on plan achievements, ordinance adoption and monitoring results
- Make recommendations on any required changes based on available data

The initial cost of this coordinator position is expected to be $145,000/year. The cost for these services may be shared with other local WMAs.

Improvements

This plan has detailed dozens of priority projects within the watershed that are intended to achieve a set of short-term water quality goals. The table on the next page provides a summary of the overall infrastructure investments that have been recommended by this plan. For more specific information regarding these projects, refer to Chapter 10 of this plan.

Monitoring

Water quality monitoring will require resources to apply for grants and financial support, install monitoring stations, compensate for staff time and resources to collect samples and record results and pay for laboratory testing.

Maintenance

Several types of maintenance activities will be required to execute this plan and keep constructed improvements in good working order. Forested areas within stream buffers may need selective clearing of underbrush and invasive species to encourage establishment of more erosion resistant surface vegetation. Where new areas of native vegetation are established, short-term maintenance activities may include minor erosion repair and re-seeding, spot spraying of weeds. Long-term maintenance includes re-seeding, mowing and controlled burns. Streambank stabilization projects may require some repairs after major flood events. Other stormwater best management practices require removal of collected sediments, other debris and repairs to keep them operating as intended. These needed maintenance activities will likely not occur, if its cost is not identified and included in local budgets.
### Category and Projected Cost (2016)

<table>
<thead>
<tr>
<th>Category</th>
<th>Projected Cost (2016)</th>
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<tbody>
<tr>
<td>Rural Case Study Subwatershed</td>
<td>$2,595,000</td>
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<tr>
<td>Urban Case Study Subwatershed</td>
<td>$5,775,000</td>
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<tr>
<td>Developing Case Study Subwatershed</td>
<td>$3,250,000</td>
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<tr>
<td>Other Watershed Level Projects</td>
<td>$15,555,000</td>
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<tr>
<td>Current Capital Improvements Projects</td>
<td>$2,485,000</td>
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### Yearly Monitoring Costs

<table>
<thead>
<tr>
<th>Year</th>
<th>Real-time Monitoring</th>
<th>Grab Sample Monitoring</th>
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<tbody>
<tr>
<td>2016</td>
<td>$5,000</td>
<td>$15,000</td>
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<tr>
<td>2017</td>
<td>$125,000</td>
<td>$15,000</td>
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<tr>
<td>2018</td>
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<td>2025</td>
<td>$56,000</td>
<td>$15,000</td>
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</tbody>
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### Expected Cost of Maintenance (Urban Areas)

<table>
<thead>
<tr>
<th>Practice</th>
<th>Cost (in 2015 $)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selective Clearing</td>
<td>$14,000 / acre</td>
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<tr>
<td>Re-seeding (native vegetation)</td>
<td>$6,000 / acre</td>
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<tr>
<td>Controlled Burns</td>
<td>$1,500–$2,000 / each</td>
</tr>
<tr>
<td>Repairs (restored streambank areas)</td>
<td>$12,000 / year / restored stream mile</td>
</tr>
<tr>
<td>Debris Removal</td>
<td>$10,000 / year / stream mile</td>
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</tbody>
</table>

### Local Jurisdictions and Staff

To successfully implement this plan, city and county staff will need to cooperate. Key staff will need to review local ordinances and policies to identify current procedures that are in conflict with the recommendations of this plan. These staff should work with the project coordinator to draft language for ordinances and policy changes. They will also need to identify the financial needs expected for their jurisdiction based on this plan and determine how each area will be funded (capital improvement program, storm water utility, grant, etc.).

Any staff responsible for the review of storm water management plans and calculations should become familiar with the design and calculation methods set forth in the Iowa Stormwater Management Manual. The Iowa Stormwater Education Partnership has also developed other tools such as model ordinances and checklists which may be helpful to review staff when implementing the changes recommended in this plan.

### Citizens and Businesses

Private organizations and individual citizens can make a difference. It is most effective to address stormwater as close to its sources as possible. Private homeowners can install rain barrels, rain gardens and direct downspouts away from driveways and other paved areas. Local businesses and agencies can use stormwater retrofits to address the quality and quantity of stormwater runoff from their properties. Refer to Chapter 11 for more information on how to engage these groups through educational efforts.
Sources of Financial Support

**Stormwater Utility Funds**
Many communities have established these funds. They collect fees from “users” of the utility (any property which generates runoff) which are usually added to City water bills. The fees are usually related to the amount of impervious area on a given property. These are funds which can be directly collected by the individual communities, but must be used to fund stormwater-related items.

**Grant Opportunities**

**Sponsored Projects Program via State Revolving Fund**
Municipalities that borrow funds to complete sanitary collection or treatment projects can piggyback a stormwater project through the Sponsored Projects Program. The state adjusts the interest rate on the project loan, allowing an extra 10% to be borrowed, but the repayment amount remains the same. Essentially, for every $1 million spent on a sanitary project, $100,000 can be borrowed toward construction of a stormwater quality project, at no additional cost to the municipality receiving the loan.

**IDALS Urban Water Quality Initiative (WQI)**
A program which takes annual requests to fund water quality improvement projects, with a maximum grant amount of $100,000.

**Watershed Improvement Review Board**
This program used to be a significant source of funding for stormwater improvement projects in both rural and urban areas. Projects were eligible for grants up to $500,000. However, in recent years the program has not been adequately funded at the State level. Watershed Management Authorities could work together to lobby for restored funding for this important program.

**Polk County SWCD REAP funding for urban stormwater practices**
Small amounts of funding ($10,000 / year) are available for small-scale stormwater (rainscaping) practices on private lands.

**Environmental Quality Incentives Program (EQIP)**
Funding from this program is available from county SWCD offices through IDALS and NRCS for conservation practices on private agricultural lands.

**Resource Enhancement and Protection (REAP)**
State of Iowa investments in the enhancement and protection of the state’s natural and cultural resources. Funding is allocated to a variety of programs which may relate to projects included within this plan:
- City Parks and Open Space
- County Conservation
- Private / Public Open Space Acquisition
- Conservation Education
- Roadside Vegetation
- Soil and Water Enhancement