

7.0 Implementation Program

7.1 Implementation Program

The implementation program of this Plan includes both capital improvement (structural) projects and non-structural activities (e.g. studies). The implementation program identifies the specific projects, studies and other activities necessary to implement the VBWD goals and policies. Table 7-1 is a comprehensive list of the VBWD implementation program. The implementation program components will be funded as shown in Table 7-1 and in accordance with applicable state laws.

The activities in Table 7-1 (implementation table) are broken down into the following headings (and item numbers):

Annual Administrative Activities (AA)

Annual Operations and Maintenance (AOM)

Annual Data Collection and Reporting Activities (ADC)

Non-Annual Administrative Activities (A)

Non-Annual Data Collection and Reporting Activities (DC)

Non-Annual Studies (S)

Capital Projects (P)

For each activity, Table 7-1 provides a description of the activity, gives a plan reference (e.g., Section 4.2.7), identifies the VBWD's involvement in the implementation, provides an estimated cost, lists the potential funding sources, and shows the proposed year of implementation. In most cases, VBWD will be the lead agency for implementing the activities and will cooperate with other agencies and organizations. However, many of the activities in the VBWD Plan are known only at the conceptual level. As projects become better-defined, so will the responsibilities of VBWD and the other participating agencies/organizations. The estimated costs given in the table are the overall costs. The actual cost to the VBWD may be less than shown in the table, because of cost sharing with other organizations, grants, etc.

Table 7-2 reorganizes all of the activities in Table 7-1 to show the year-by-year estimated costs of the implementation program and the total annual costs from 2005 – 2015.

VBWD will follow the process outlined in the applicable statutes for implementing proposed capital improvement projects. Typically, capital improvement projects begin with the preparation of a feasibility study and report on the proposed project. The VBWD will coordinate with and involve the affected local units of government and other agencies in the implementation of capital projects. If VBWD orders the project, then plans and specifications are prepared, the funding mechanism is finalized and the project is advertised for bid. If the funding mechanism changes for any of the

capital improvement projects listed in Table 7-1, the VBWD will hold a public hearing on the proposed change to the funding method before ordering the project.

The structural and non-structural activities listed in Table 7-1 will be financed in accordance with the policies in Section 4.9, as guided by Tables 4.9-2 and 4.9-3, and as shown in Table 7-1. Most non-structural activities will be funded through the VBWD administrative budget (called “general fund” in Minnesota statutes) fund. In accordance with laws and county requirements, the VBWD must adopt a budget for the following year and forward its budget to the counties by September 15 (see Section 4.9 for more details regarding specific county budgeting deadlines for capital projects). The VBWD holds an annual hearing on the budget prior to forwarding it to the counties.

The capital improvement project costs in Table 7-1, expressed in 2004 dollars, will be adjusted annually in accordance with an inflation index (i.e., the Engineering News Record’s Construction Cost Index). As stated in Section 6.3, the VBWD will consider the following increases in estimated project costs to be consistent with the VBWD Plan and not require a minor or general plan amendment:

- The updated cost estimate is \$500,000 or less, and the increase is less than \$200,000 higher than the estimated costs shown in Table 7-1 (as annually adjusted);

OR

- The updated cost estimate is more than \$500,000, and the increase is up to 60% higher than the estimated costs shown in Table 7-1 (as annually adjusted).

If the cost of a capital improvement project in Table 7-1 increases by more than these amounts, the VBWD will follow the minor plan amendment process before implementing the project (see Section 6.3 for more information regarding plan amendments).

Similarly, the VBWD may implement the activities and projects listed in Table 7-1 at a different time than shown in the table (e.g. year 2007 rather than 2009), as circumstances dictate. For example, the availability of grants and partnerships could result in either acceleration or delay of projects. The VBWD will consider such shifts in the time schedule to also be consistent with the Plan and not require a minor or general plan amendment (see Section 6.3 for more information regarding plan amendments).

The VBWD will consider any changes to estimated costs for annual activities, studies and other non-structural projects to be consistent with the VBWD Plan and not require a minor or general plan amendment (see Section 6.3 for more information regarding plan amendments).

In 2011 this Plan was amended to document the inclusion of two new subwatersheds formerly part of the Lower St. Croix Watershed Management Organization (LSCWMO) into the VBWD: Kelle’s Coulee and Swede Hill Creek. The additional watershed area represented by these subwatersheds (5 square miles) represents a 7.7% increase in the watershed area of the VBWD. Kelle’s Coulee adds

3.1 miles of perennial and intermittent stream channel to the VBWD, increasing the stream channel length in the VBWD by 27%. The additional area and resources the VBWD now manages may increase the cost of VBWD-wide implementation items presented in Table 7-1. The costs for revised or new implementation items, including those in the Swede Hill Creek watershed and Kelle's Coulee watershed, are presented in 2011 dollars. Other items are presented in 2005 dollars.

7.2 Impact on Local Governments

This section discusses how the VBWD's implementation program will affect local government in terms of cost and administrative issues.

The VBWD's intention is to limit additional requirements imposed upon local units of government as much as possible while still accomplishing the VBWD's purposes and implementing the Plan. The VBWD's implementation program will be funded through tax levies. These taxes would not affect the local unit of government's finances directly since the VBWD tax levies do not apply towards the local unit of government's levy limits. However, there would be a financial impact to the residents of the cities and townships that reside in the VBWD watershed.

Some of the implementation program elements reflect the goals, policies and requirements of state and regional units of government that local units of government would need to address in any case.

Some of the cities already have ordinances in place that address many of the VBWD requirements. Applicable ordinances address shorelands, floodplains, wetland protection, stormwater management, erosion control, and stormwater system maintenance. Local governments must adopt the DNR's shoreland management regulations, if required by the DNR.

The VBWD is not changing the wetland regulation burden for the member cities since VBWD is willing to continue to act as the local government unit responsible for administering the Wetland Conservation Act.

Table 7-1

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
Annual Administrative Activities						
AA-1	General education activities: <ul style="list-style-type: none"> • Increase awareness of VBWD • Coordinate and cooperate with other entities to educate the public on general watershed issues • Promote positive behaviors through education and other public information efforts 	Section 4.1.7	VBWD will coordinate with potential partners if appropriate	\$6,000	VBWD Ad Valorem	Annually
AA-2	Update VBWD website	Section 4.1.7	VBWD will perform	\$5,000	VBWD Ad Valorem	Annually
AA-3	Respond to information requests/provide information	Section 4.1.7	VBWD will perform	\$21,000	VBWD Ad Valorem	Annually
AA-4	Recruit and train volunteers for monitoring and other programs/projects	Section 4.1.7	VBWD to perform	\$2,000	VBWD Ad Valorem	Annually
AA-5	Develop and implement VBWD volunteer recognition program	Section 4.1.7	VBWD to perform	\$1,000	VBWD Ad Valorem	Annually
AA-6	Maintain VBWD Citizen Advisory Committee and seek to develop meaningful responsibilities for committee	Section 4.1.7	VBWD to perform	\$2,000	VBWD Ad Valorem	Annually
AA-7	Develop plan for an incentive program encouraging implementation of best management practices in the watershed. This incentive program will focus on residents, but can also apply to businesses, developers, and others.	Section 4.1.7	VBWD performs, possible cooperation with other units of government	Develop program: \$5,000 Administer/Implement program: \$50,000	VBWD Ad Valorem	2006 – Develop program 2007 – Begin implementing annually thereafter
AA-8	Hire watershed educator and ongoing watershed educator fees	Section 4.1.7	VBWD performs	\$25,000 per year	VBWD Ad Valorem	2006 – Hire

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
AA-9	Review and comment on MPCA's draft impaired waters (303(d)) list	Section 4.2.7	VBWD performs	\$2,000	VBWD Ad Valorem	Every other year
AA-10	Buffers: require 16.5-foot wide or wider buffers and encourage/ support wider buffers for new VBWD-permitted projects; encourage/support buffers at existing homes/ businesses and park areas	Section 4.2.7	VBWD performs, possible cooperation with other units of government	\$0 (included in permit administration or education items)	VBWD Ad Valorem	Annually
AA-11	Develop and implement incentive program to encourage developers to try new and innovative stormwater management techniques. Incentive program could include VBWD funding of additional cost for implementing innovative measures, VBWD construction of demonstration project (see Capital Projects section of Table 7-1), and VBWD grant program.	Section 4.4.7	VBWD performs, possible cooperation with other units of government	Develop program: \$5,000 Administer/ Implement program: \$50,000	VBWD Ad Valorem	2005 – Develop program 2006 – Begin implementing Annually thereafter
AA-12	Conform to NPDES Phase II MS4 requirements, implement VBWD's Stormwater Pollution Prevention Plan (SWPPP)	Section 4.4.7	VBWD performs	\$3,000	VBWD Ad Valorem	Annually
AA-13	Administer VBWD permit program	Section 4.4.7	VBWD performs	\$25,000	VBWD Ad Valorem (for non-escrow projects or projects with waived fee)	Annually
AA-14	Review and comment on all DNR public waters work permit applications	Section 4.5.7	VBWD performs	\$500 per permit	VBWD Ad Valorem	Annually

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
AA-15	Cooperate with other units of government to address groundwater quality issues	Section 4.6.7	VBWD performs, with other units of government	\$2,000	VBWD Ad Valorem	Annually
AA-16	Administer Wetland Conservation Act (VBWD is Local Government Unit)	Section 4.7.7	VBWD performs	\$21,500	VBWD Ad Valorem (for non-escrow projects or projects with waived fee) Others paid for through VBWD permit program	Annually
AA-17	Inspect VBWD-permitted projects & enforcement	Section 4.8.7	VBWD performs	Paid for through VBWD permit program	Paid for through VBWD permit program	Annually
AA-18	Valley Creek – facilitate meeting regarding 2000 Subwatershed Plan implementation	Section 5.20.2.1, Item 7	VBWD coordinates	\$1,000	VBWD Ad Valorem	Annually
Annual Operations and Maintenance						
AOM-1	Operate, inspect, maintain, modify, and repair all existing and future VBWD water quality improvement systems	Section 4.2.7	VBWD performs or contracts for performance by others	Inspection: \$1,000 Minor repairs: \$5,500	VBWD Ad Valorem	Annually
AOM-2	Operate, inspect, maintain, modify, and repair all existing and future VBWD flood control systems (e.g. Project 1007, Rest Area Dam, Eagle Point Lake Dam, Olson Lake Estates Outlet, Echo Lake Outlet, Downs Lake Outlet, Weber Pond Outlet)	Section 4.5.7	VBWD performs For the Rest Area Dam, VBWD performs with the Minnesota Department of Transportation For the Echo Lake and Weber Pond Outlet, VBWD will work with the City of Mahtomedi and/or adjacent landowners to make repairs or VBWD will contract for repairs	Annual inspection: \$4,000 Minor repairs: \$20,000	VBWD Ad Valorem; For Rest Area Dam, VBWD responsible for 80% of repair, reconstruction and maintenance costs	Inspections: Annually Operation, maintenance and repair: as needed
AOM-3	Valley Creek – inspect dam	Section 5.20.3	VBWD works with landowner to perform	\$1,500	VBWD Ad Valorem	Annually
Annual Data Collection and Reporting Activities						
ADC-1	Publish and distribute VBWD annual report	Section 4.1.7	VBWD will perform	\$6,500	VBWD Ad Valorem	Annually

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
ADC-2	Basin water quality monitoring	Section 4.2.7 and individual subsections of Section 5 and Table 4.2.3	<ul style="list-style-type: none"> • VBWD performs Management Level Monitoring • Volunteers perform Survey Level Monitoring through the Metropolitan Council's Citizen-Assisted Monitoring Program (paid by VBWD) (if no volunteers found, VBWD performs) • Volunteers perform Secchi Disc Monitoring through Minnesota Pollution Control Agency's Citizen Lake Monitoring Program (paid by VBWD) (if no volunteers found, VBWD performs) • VBWD performs Habitat Monitoring • VBWD performs any needed Intensive Monitoring 	Varies by year, likely range \$40,000-\$85,000 per year, not including Intensive Monitoring	VBWD Ad Valorem	Annually
ADC-3	Analyze and report basin water quality monitoring, including calculating trends and action triggers and comparing results to triggers	Section 4.2.7	VBWD performs	\$8,000	VBWD Ad Valorem	Annually
ADC-4	Stream water quality and streamflow monitoring of perennial streams (Valley Creek), and annual reporting	Sections 4.3.7, 5.10, and 5.20.2.1, Item 1	Biological monitoring: VBWD performs, Water quality & streamflow monitoring (WOMP): VBWD performs or contracts for performance, with involvement of Metropolitan Council, and volunteers perform	Biological monitoring: \$1,000 WOMP: \$16,000 (VBWD portion of costs)	VBWD Ad Valorem	Annually

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
ADC-4b	Stream water quality and streamflow monitoring of Kelle's Coulee and annual reporting	Sections 4.3.7 and 5.37.2.1, Item 1	Biological monitoring: VBWD performs, Water quality & streamflow monitoring: VBWD performs or contracts for performance	Biological monitoring: \$1,000 (beginning in 2012) Water quality and streamflow: \$7,000 (VBWD portion of cost), beginning in 2011	VBWD Ad Valorem Remaining costs paid by grant funds	Annually, beginning in 2011
ADC-5	Continue volunteer stream monitoring program <ul style="list-style-type: none"> • Valley Creek 	Section 5.20.2.1, Item 2	VBWD funds	\$6,000 (Valley Creek)	VBWD Ad Valorem	Annually
ADC-5b	Assess feasibility of volunteer stream monitoring program for Kelle's Coulee	Section 5.37.2.1, Item 2	VBWD funds	\$1,500	VBWD Ad Valorem	2012
ADC-6	Physical monitoring of DNRpublic waters watercourses and report results <ul style="list-style-type: none"> • Valley Creek • Raleigh Creek • Kelle's Coulee 	Sections 4.3.7, 5.11.2, 5.37.2	VBWD performs	\$12,000	VBWD Ad Valorem	Annually
ADC-7	Raleigh Creek – Fund volunteer stream monitoring program	Section 5.11.2	VBWD funds	\$4,000	VBWD Ad Valorem	Annually
ADC-8	Monthly basin water level monitoring and reporting. Expand to include: Echo Lake, Weber Pond, Capaul's Pond, Legion Pond, Bay Lake, Goose Lake, Clear Lake, Mergens Pond, Rose Lake and Kramer Pond	Sections 4.5.7, 5.3.3, 5.4.3, 5.6.3, 5.27.3, 5.28.3, 5.29.3, 5.30.3, 5.32.3, 5.33.3, and 5.34.3	VBWD performs, through volunteers (assumed)	\$2,000	VBWD Ad Valorem	Annually
ADC-9	Daily precipitation monitoring and monthly reporting	Section 4.5.7	VBWD performs through volunteer(s)	\$100	VBWD Ad Valorem	Annually
ADC-10	Snowpack monitoring	Section 4.5.7	VBWD performs	\$3,000	VBWD Ad Valorem	When needed
ADC-11	Groundwater level monitoring & reporting	Section 4.5.7 and 4.6.7	VBWD performs	\$3,500	VBWD Ad Valorem	At least quarterly monitoring, annual reporting

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
ADC-12	Groundwater quality monitoring	Section 4.6.7	VBWD Performs	\$10,000 - \$20,000, pending plan development (see A-27)	VBWD Ad Valorem	Annually, pending monitoring plan (see A-27)
Non-Annual Administrative Activities						
A-1	Hold tours, events, and/or orientation meetings for interested citizens	Section 4.1.7	VBWD performs	\$5,000-\$10,000 per event	VBWD Ad Valorem	As needed or in response to requests
A-2	Seek input from Technical Advisory Committee	Section 4.1.7	VBWD performs	\$1,000 per meeting	VBWD Ad Valorem	As needed
A-3	Revise individual water body classifications	Section 4.2.7	VBWD performs	Variable, less than \$5,000	VBWD Ad Valorem	As warranted
A-4 (See also P-4 in this table)	Implement recommended actions resulting from habitat monitoring program	Section 4.2.7	VBWD performs, possibly partner with others	Variable, less than \$20,000	VBWD Ad Valorem	As recommended
A-5	Cooperate with the DNR and other groups on fisheries issues	Section 4.2.7	DNR and other groups perform, VBWD assists	Variable, less than \$2,500	VBWD Ad Valorem	As requested
A-6	Review local watershed management plans	Section 4.4.7, Section 4.5.7, Section 4.8.7, Section 8.3	VBWD performs	Variable, costs could range from \$5,000 to \$15,000 per plan	VBWD Ad Valorem	2005, 2007, 2009
A-7	Work with local government units to adopt/revise land use ordinances to allow for runoff prevention methods (narrower streets smaller parking lots, etc.)	Section 4.4.7	VBWD performs	\$5,000/year	VBWD Ad Valorem	2006-2008

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
A-8	Review community comprehensive land use plans, proposed revisions and zoning changes	Section 4.5.7, Section 8.1	VBWD performs	\$2,000 per plan	VBWD Ad Valorem	As needed. Assumed in 2008 for Oakdale, Lake Elmo, Woodbury, Afton, Oak Park Heights, Grant, White Bear Lake, Maplewood, Mahtomedi, North St. Paul
A-9	Review environmental assessments (e.g. EAW, EIS, AUAR)	Section 4.5.7	VBWD performs	\$2,000 per assessment	VBWD Ad Valorem	As needed
A-10	Review community floodplain and shoreland management ordinances	Section 4.5.7	VBWD performs	\$500 per ordinance	VBWD Ad Valorem	As needed. Assumed in 2008 for cities listed in A-8.
A-11	Review community wellhead protection plans	Section 4.6.7	VBWD performs	\$1,000 per plan	VBWD Ad Valorem	As needed
A-12	Cooperate with cities and other public water suppliers in education efforts regarding preventing contamination of groundwater supplies	Section 4.6.7	VBWD performs, with cities and others	\$1,000 per year	VBWD Ad Valorem	As needed
A-13	Update VBWD Groundwater Management Rules and Regulations	Section 4.6.7	VBWD performs	See S-4	VBWD Ad Valorem	2005
A-14	Revise VBWD wetland management Rules and Regulations to include wetland management standards and classification system.	Section 4.7.7	VBWD performs	\$10,000	VBWD Ad Valorem	2006
A-15	Cooperate with other agencies to encourage good agricultural conservation measures in VBWD	Section 4.8.7	VBWD performs	\$500	VBWD Ad Valorem	As needed
A-16	Update VBWD legal boundary	Section 4.9.7	VBWD performs, with adjacent water management organizations	Varies, less than \$5,000	VBWD Ad Valorem	As needed

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
A-17	Begin updating VBWD Watershed Management Plan	Section 6.2	VBWD performs	\$100,000 - \$400,000 Dependent on Minnesota Statute and Rule Changes	VBWD Ad Valorem	2013
A-18	Silver Lake – Encourage buffers	Section 5.1.2.1, Item 2d and Section 4.2.7	VBWD performs and works with North St. Paul and Maplewood	\$1,000	VBWD Ad Valorem	2006
A-19	Acorn Lake – Require Oakdale to install outlet restriction or provide information that shows not needed	Section 5.2.3	City of Oakdale performs	\$500	VBWD Ad Valorem	2007
A-20	Long Lake Outlet operation– Communication with property owners	Section 5.5.3.3, Item 3	VBWD performs	\$500	VBWD Ad Valorem	As needed, assume every other year
A-21	Eagle Point Lake watershed – Work with WCP to protect oak forest areas and upland buffers	Section 5.12.2.1, Item 3	Washington County Parks performs with help from VBWD	\$1,000	VBWD Ad Valorem	2007
A-22	Valley Creek – provide incentives and technical assistance for removing or modifying flood control structures	Section 5.20.2.1, Item 5	VBWD performs	\$10,000	VBWD Ad Valorem	2007
A-23	Valley Creek – work with agencies on reduction of thermal impacts	Section 5.20.2.1, Item 6	VBWD coordinates with other agencies	\$2,000	VBWD Ad Valorem	2006
A-24	Sunnybrook Lake – Work with Grant on raising low roads	Section 5.21.3.4, Item 4	VBWD works with the City of Grant	\$10,000	VBWD Ad Valorem	2005
A-25	Obtain additional Washington County Two-foot contour data for added subwatersheds	Section 5.37	VBWD performs	\$2,500	VBWD Ad Valorem	2011
A-26	Develop groundwater quality monitoring plan	Section 4.6.7	VBWD performs	\$7,000	VBWD Ad Valorem	2012

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
Non-Annual Data Collection and Reporting Activities						
DC-1	Monitor water quality of Raleigh Creek and other VBWD intermittent streams	Sections 4.3.7 and 5.11.2	VBWD performs	Raleigh Creek: \$5,000	VBWD Ad Valorem	As required/ requested, in response to identified or suspected problem
DC-2	Monitor physical condition of streams other than Valley Creek, Raleigh Creek and Kelle's Coulee	Section 4.3.7	VBWD performs	\$5,000	VBWD Ad Valorem	As needed, in response to problems
DC-3	Stormwater pond inventory – locate ponds and determine if ponds meet criteria	Section 4.4.7	VBWD performs	\$50,000	VBWD Ad Valorem	2006-2010
DC-4	Identify, inventory, prioritize, and monitor erosion and sedimentation problems that arise outside of VBWD permit program	Section 4.8.7	VBWD performs	\$15,000	VBWD Ad Valorem	As identified
DC-5	Silver Lake Intensive Water Quality Monitoring	Section 5.1.2.1, Item 2a	VBWD performs	\$10,000	VBWD Ad Valorem	2006
DC-6	Silver Lake ditch erosion stabilization evaluation	Section 5.1.2.1, Item 4	VBWD performs	\$5,000	VBWD Ad Valorem	2007
DC-7	Long Lake – Evaluate ravine erosion from Weber Pond	Section 5.5.2.1, Item 3a	VBWD performs	\$5,000	VBWD Ad Valorem	2006
DC-8	Long Lake – Evaluate sedimentation source from Highway 36	Section 5.5.2.1, Item 3b	VBWD performs	\$2,000	VBWD Ad Valorem	2006
DC-9	Goose Lake – Investigate gully erosion	Section 5.29.2, Item 2	VBWD performs	\$3,000	VBWD Ad Valorem	2008
DC-10	Goose Lake – complete aquatic plant surveys to determine if curlyleaf pondweed is kept in check	Section 5.29.2, Item 4	VBWD performs	\$5,000	VBWD Ad Valorem	Every 3 years
DC-11	Goetschel Pond – Investigate gully erosion	Section 5.31.2, Item 3	VBWD performs	\$2,000	VBWD Ad Valorem	2005

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Item Number	Item Description	Plan Reference	VBWD and other Government Involvement	Total Estimated Cost	Potential Funding Sources/Authority	Proposed Implementation Year
DC-12	Mergens Pond - develop bathymetric map	Section 5.32.2	VBWD performs	\$1,000	VBWD Ad Valorem	2005
DC-13	Spring and erosion inventory – locate springs in areas of karst geology and identify erosion problem areas in Kelle’s Coulee and Swede Hill Creek watersheds	Section 4.6.6, Section 5.37.2.1, Item 4, Section 5.38.2.1	VBWD performs	\$10,000	VBWD Ad Valorem	2013
Non-Annual Studies						
S-1	Complete diagnostic-feasibility studies, when recommended, to determine needed water quality improvement projects	Section 4.2.7	VBWD performs	\$100,000 - \$300,000	VBWD Ad Valorem	As recommended
S-2	TMDL studies: cooperate with MPCA to determine responsible party for developing TMDL study, actively participate in TMDL process	Section 4.2.7	VBWD performs TMDL study (if found to be responsible party), VBWD performs implementation, other agencies/groups likely involved	\$100,000 - \$300,000	VBWD Ad Valorem	As required
S-3	Develop stormwater pond maintenance/repair/ retrofit plan	Section 4.4.7	VBWD performs	\$10,000	VBWD Ad Valorem	2006
S-4	Update VBWD Stormwater Management Rules and Regulations, including stormwater volume control requirement	Section 4.4.7, Section 5.20.2.1, Item 2	VBWD performs	\$35,000 (with A-13 & S-14)	VBWD Ad Valorem	2005
S-5	Assist property owners in FEMA unnumbered A zones in obtaining Letters of Map Amendment or Letters of Map Revision	Section 4.5.7	VBWD performs	\$5,000 per instance	VBWD Ad Valorem	As needed

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S-6	Complete wetland inventories and functional assessments in targeted areas of the VBWD, and meet with stakeholders to share results, gather feedback, and explore partnerships/projects.	Section 4.7.7	VBWD performs	\$25,000 per year	VBWD Ad Valorem	Inventories: 2006-2015 Meetings: 2007-2015
S-7	Develop invasive species education and control program	Section 4.7.7	VBWD performs	\$5,000	VBWD Ad Valorem	2008
S-8	Silver Lake – Study (i.e. literature review) of curlyleaf pondweed and Eurasian water milfoil transport to downstream waters	Section 5.1.2.1, Item 3	VBWD performs	\$2,000	VBWD Ad Valorem	2008
S-9	Echo Lake Addition – Flood Relief Study	Section 5.3.3.1	VBWD and/or Mahtomedi performs study, Mahtomedi implements project (See P-13)	\$20,000	VBWD Ad Valorem	2005
S-10	Lake DeMontreville – Prepare feasibility study for sedimentation control project	Section 5.7.2.1	VBWD performs	\$20,000	VBWD Ad Valorem	2007
S-11	Rest Area Pond – Study (i.e. literature review) possible downstream impact of curlyleaf pondweed infestation	Section 5.17.2, Item 2	VBWD performs	\$2,000	VBWD Ad Valorem	2008
S-12	Rest Area Pond – Investigate feasibility of restricting outlet	Section 5.17.3	VBWD performs study, working with Mn/DOT	\$10,000	VBWD Ad Valorem	2008
S-13	Valley Creek – Identify critical areas of concern for protection	Section 5.20.2.1, Item 1	VBWD performs	\$5,000	VBWD Ad Valorem	2005
S-14	Valley Creek – Modify buffer rules	Section 5.20.2.1, Item 3	VBWD performs	With S-4	VBWD Ad Valorem	2005
S-15	Kelle’s Coulee – Streambank stabilization feasibility study	Section 5.37.2.1, Item 3	VBWD performs	\$20,000	VBWD Ad Valorem	Pending survey results (see DC-13)
S-16	Swede Hill Creek – Slope/bluff stabilization feasibility study	Section 5.38.2.2	VBWD performs	\$15,000	VBWD Ad Valorem	Pending survey results (see DC-13)

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Capital Projects						
P-1	Install information signs at current and future VBWD projects	Section 4.1.7	VBWD performs	\$5,000 per sign	VBWD Ad Valorem	As needed. Assumed 2008 for current projects.
P-2	Implement stream management and stream restoration projects and actions to address identified stream degradation problems Identified projects:	Section 4.3.7	VBWD performs, possibly partnering with other organizations	Variable, up to \$1,000,000	VBWD Ad Valorem if under \$500,000	To be determined
	<ul style="list-style-type: none"> Raleigh Creek – Stream management and stream restoration project implementation 	Section 5.11.2	VBWD performs	\$50,000	If over \$500,000: Streams with public access: 50% watershed-wide ad valorem, 50% subwatershed ad valorem Streams without public access: 25% watershed-wide ad valorem, 50% subwatershed ad valorem, 25% special assessment	2005
	<ul style="list-style-type: none"> Raleigh Creek – Detention basin(s) flow reduction & water quality treatment project 	Section 5.11.3	VBWD performs with financial support from Lake Elmo, Oakdale, and Washington County	Up to \$1,000,000		2006
	Kelle's Coulee – implement stream stabilization projects	Section 5.37.2.1, Item 6	VBWD performs	Up to approx. \$100,000/project	VBWD Ad Valorem	As identified
	Swede Hill Creek – implement slope/bluff stabilization projects	Section 5.38.2.1	VBWD performs	Up to approx. \$100,000/project	VBWD Ad Valorem	As identified
P-3	Implement TMDL studies in VBWD	Section 4.2.7	VBWD performs TMDL study (if found to be responsible party), VBWD performs implementation, other agencies/groups likely involved	\$500,000 to \$1,000,000	VBWD Ad Valorem	As required
P-4	Implement recommended projects resulting from habitat monitoring program, i.e. lakescaping demonstration project, sediment excavation, aquatic plant management	Section 4.2.7	VBWD performs	\$10,000 to \$100,000	VBWD Ad Valorem	As needed

Table 7-1

**IMPLEMENTATION PROGRAM
Valley Branch Watershed District**

P-5	Implement stormwater pond maintenance/repair/retrofit plan	Section 4.4.7	VBWD performs	\$200,000 per year	Projects of \$500,000 or less: VBWD Ad Valorem Projects more than \$500,000: Water Management District (Utility)	Starting in 2012 and ongoing until plan fully implemented
P-6	Construct demonstration project for new and innovative stormwater management techniques	Sections 4.4.7 and 5.20.2.1, Item 4	VBWD performs and/or partners with other organizations	\$100,000 per project	VBWD Ad Valorem	2007 and in future years, when warranted
P-7	Implement invasive species education and control program	Section 4.7.7	VBWD performs	\$10,000	VBWD Ad Valorem	2008 and in future years, if needed
P-8	Implement measures to correct erosion and sedimentation problems	Section 4.8.7	VBWD performs or requires other units of government to perform	Varies up to \$200,000, depending on water body	VBWD Ad Valorem (See Table 4.9-2 for projects more than \$500,000)	As needed
P-9	Silver Lake – In-lake alum treatment	Section 5.1.2.1, Item 2b	VBWD performs	\$35,000	VBWD Ad Valorem	2009
P-10	Silver Lake – Manage macrophytes	Section 5.1.2.1, Item 2c	VBWD performs	\$190,000	VBWD Ad Valorem	2009
P-11	Silver Lake ditch erosion stabilization project implementation	Section 5.1.2.1, Item 4	VBWD performs	\$50,000	VBWD Ad Valorem	2008
P-12	Echo Lake – In-lake alum treatment, if it benefits downstream waters	Section 5.3.2, Item 3a	VBWD performs	\$20,000	VBWD Ad Valorem	2010
P-13	Echo Lake Addition - Flood Relief Implementation	Section 5.3.3.1	Mahtomedi performs (See S-9)	Not Estimated	Not Applicable	Not Applicable
P-14	Long Lake - Water quality improvement projects – one of the following: 1) Stormwater alum treatment, 2) 3 wet detention basins and infiltration basin, or 3) 3 wet detention basins, replacing about 26 sanitary septic systems.	Section 5.5.2.1, Item 1	VBWD performs	\$500,000 to \$1,500,000	If under \$500,000: VBWD Ad Valorem If over \$500,000: 75% VBWD Ad Valorem and 25% Lake Olson Watershed (Benefits Lake DeMontreville and Olson, too)	2010

Table 7-1

**IMPLEMENTATION PROGRAM
Valley Branch Watershed District**

P-15	Long Lake – Manage curlyleaf pondweed	Section 5.5.2.1, Item 2	VBWD performs	\$195,000	VBWD Ad Valorem	2010
P-16	Long Lake – Prepare feasibility study and implement project to stabilize ravine from Weber Pond	Section 5.5.2.1, Item 3a	VBWD performs	\$100,000	VBWD Ad Valorem	2008
P-17	Long Lake – Work with Mn/DOT to eliminate sedimentation source from Highway 36	Section 5.5.2.1, Item 3b	VBWD works with Mn/DOT and VBWD implements	\$200,000	If under \$500,000: VBWD Ad Valorem If over \$500,000: 75% VBWD Ad Valorem and 25% Long Lake Watershed	2008
P-18	Long Lake Outlet Debris Removal	Section 5.5.3.3, Item 2	VBWD performs	\$5,000	VBWD Ad Valorem	As needed
P-19	Lake DeMontreville – In-lake alum treatment water quality improvement project	Section 5.7.2.1, Item 1a	VBWD performs	\$75,000	VBWD Ad Valorem	2011
P-20	Lake DeMontreville – Curlyleaf pondweed management	Section 5.7.2.1, Item 1b	VBWD performs	\$400,000	VBWD Ad Valorem	2011
P-21	Lake DeMontreville – Implement sedimentation control project	Section 5.7.2.1	VBWD performs	\$200,000	VBWD Ad Valorem	2008
P-22	Lake Olson - In-lake alum treatment water quality improvement project	Section 5.8.2.1, Item 1	VBWD performs	\$60,000	VBWD Ad Valorem	2012
P-23	Lake Olson – Curlyleaf pondweed management	Section 5.8.2.1, Item 2	VBWD performs	\$223,000	VBWD Ad Valorem	2012
P-24	Lake Olson – Abandon old well	Section 5.8.3	VBWD performs if Lake Associations does not	\$5,000	VBWD Ad Valorem	2012
P-25	Lake Jane – Curlyleaf pondweed management	Section 5.9.2.1, Item 3	VBWD performs	\$388,000	VBWD Ad Valorem	2013
P-26	Eagle Point Lake – Curlyleaf pondweed management	Section 5.12.2.1, Item 2a	VBWD performs	\$300,000	VBWD Ad Valorem	2014
P-27	Eagle Point Lake wetlands – Reed canary grass eradication	Section 5.12.2.1, Item 2b	VBWD partners with Washington County Parks	\$25,000	VBWD Ad Valorem	2014
P-28	Eagle Point Lake Dam Revegetation	Section 5.12.2.1, Item 4	VBWD performs with Washington County Parks	\$10,000	VBWD Ad Valorem	2006

Table 7-1

**IMPLEMENTATION PROGRAM
Valley Branch Watershed District**

P-29	Horseshoe Lake – Curlyleaf pondweed management	Section 5.15.2, Item 4	VBWD performs	\$190,000	VBWD Ad Valorem	2015
P-30	Rest Area Pond – implement, if approved, restricting outlet	Section 5.17.3	VBWD performs	\$30,000	VBWD Ad Valorem	2014
P-31	Lake Edith – Curlyleaf pondweed management	Section 5.19.2, Item 3	VBWD performs	\$203,000	VBWD Ad Valorem	2015
P-32	Valley Creek – implement habitat improvement and stabilization projects	Section 5.20.1, Items 3 and 4	VBWD performs	\$250,000	VBWD Ad Valorem	2005-2008
P-33	Valley Creek – implement dam rehabilitation or removal project	Section 5.20.3	VBWD works with landowner	\$250,000	VBWD Ad Valorem	2006
P-34	Sunnybrook Lake – Implement Flood Level Reduction Project or other listed options	Section 5.21.3.4, Items 2 and 3	VBWD performs	\$3,800,000	Special Assessments (about 5%), Subwatershed (about 20%), and Ad Valorem (about 70%)	2005
P-35	Goose Lake –implement gully stabilization project	Section 5.29.2, Item 2	VBWD performs	\$25,000	VBWD Ad Valorem	2008
P-36	Goetschel Pond –implement gully stabilization project	Section 5.31.2, Item 3	VBWD performs	\$80,000	VBWD Ad Valorem	2007
P-37	Water quality improvement projects recommended in future water quality diagnostic feasibility studies	Section 4.2.7	VBWD performs	\$500,000 to \$1,000,000	Varies, see Table 4.9-2	As needed

**Table 7-2
IMPLEMENTATION PROGRAM SUMMARIZED BY YEAR
Valley Branch Watershed District**

	Item Number	Year											
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Annual Administration	AA-1	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000
	AA-2	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000	\$5,000
	AA-3	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000	\$21,000
	AA-4	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
	AA-5	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
	AA-6	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
	AA-7	\$0	\$5,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
	AA-8	\$0	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	AA-9	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
	AA-10	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	AA-11	\$5,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000
	AA-12	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000
	AA-13	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	AA-14	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500	\$500
	AA-15	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000
	AA-16	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000	\$20,000
	AA-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	AA-18	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000	\$1,000
TOTAL AA	\$95,500	\$170,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	\$215,500	
Annual Operation & Maintenance	AOM-1	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
	AOM-2	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	\$24,000	
	AOM-3	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	\$1,500	
	TOTAL AOM	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	\$31,500	
Annual Data Collection	ADC-1	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
	ADC-2	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	\$63,000	
	ADC-3	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	
	ADC-4	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	\$17,000	
	ADC-4b	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$8,000	\$8,000	\$8,000	\$8,000	
	ADC-5	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	\$6,000	
	ADC-5b	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,500	\$0	\$0	\$0	
	ADC-6	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$8,000	\$12,000	\$12,000	\$12,000	\$12,000	
	ADC-7	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	\$4,000	
	ADC-8	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	\$2,000	
	ADC-9	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	\$100	
	ADC-10	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	\$3,000	
	ADC-11	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	\$3,500	
ADC-12													
TOTAL ADC	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$120,600	\$127,600	\$134,100	\$132,600	\$132,600	\$132,600		

As determined. See "Additional" items below.

**Table 7-2
IMPLEMENTATION PROGRAM SUMMARIZED BY YEAR
Valley Branch Watershed District**

	Item Number	Year											
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	
Non-Annual Administrative	A-1	As needed or in response to requests. See "Additional" items section below.											
	A-2	As needed. See "Additional" items section below.											
	A-3	As warranted. See "Additional" items section below.											
	A-4	As recommended. See also P-4. See "Additional" items section below.											
	A-5	As requested. See "Additional" items section below.											
	A-6	\$15,000	\$0	\$30,000	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-7	\$0	\$5,000	\$5,000	\$5,000	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0
	A-8	\$0	\$0	\$0	\$18,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-9	As needed. See "Additional" items section below.											
	A-10	\$0	\$0	\$0	\$4,500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-11	As needed. See "Additional" items section below.											
	A-12	As needed. See "Additional" items section below.											
	A-13	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4	See S-4
	A-14	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-15	As needed. See "Additional" items section below.											
	A-16	As needed. See "Additional" items section below.											
	A-17	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$80,000	\$80,000	\$80,000	\$80,000
	A-18	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-19	\$0	\$0	\$500	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-20	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$500
	A-21	\$0	\$0	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-22	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-23	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-24	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	A-25	\$0	\$0	\$0	\$0	\$0	\$0	\$2,500	\$0	\$0	\$0	\$0	\$0
	A-26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$7,000	\$0	\$0	\$0	\$0
TOTAL A	\$25,500	\$18,000	\$47,000	\$27,500	\$5,500	\$0	\$3,000	\$12,000	\$80,500	\$80,000	\$80,500	\$80,500	
Non-Annual Data Collection and Reporting	DC-1	As required/requested, in response to identified or suspected problem. See "Additional" items below.											
	DC-2	As needed. See "Additional" items below.											
	DC-3	\$0	\$50,000	\$50,000	\$50,000	\$50,000	\$50,000	\$500	\$500	\$500	\$500	\$500	
	DC-4	As identified. See "Additional" items below.											
	DC-5	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-6	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-7	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-8	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-9	\$0	\$0	\$0	\$3,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-10	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0	\$5,000	
	DC-11	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-12	\$1,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
	DC-13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	
	TOTAL DC	\$3,000	\$72,000	\$55,000	\$53,000	\$55,000	\$50,000	\$500	\$5,500	\$10,500	\$500	\$5,500	\$5,500

**Table 7-2
IMPLEMENTATION PROGRAM SUMMARIZED BY YEAR
Valley Branch Watershed District**

	Item Number	Year										
		2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Studies	S-1	As recommended. See "Additional" items below.										
	S-2	As required. See "Additional" items below.										
	S-3	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-4	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-6	\$0	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000
	S-7	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-8	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-9	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-10	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-11	\$0	\$0	\$0	\$2,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-12	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-13	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
	S-14	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4	with S-4
	S-15	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0
	S-16	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000
	TOTAL S	\$60,000	\$35,000	\$45,000	\$44,000	\$25,000	\$25,000	\$25,000	\$25,000	\$25,000	\$45,000	\$40,000

**Table 7-2
IMPLEMENTATION PROGRAM SUMMARIZED BY YEAR
Valley Branch Watershed District**

Item Number	Year										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
P-1	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-2 (See "Additional" items, too.)	\$50,000	\$1,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-3	As required. See "Additional" items below.										
P-4	As needed. See "Additional" items below.										
P-5	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$200,000	\$200,000	\$200,000
P-6 (See "Additional" items, too.)	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-7 (See "Additional" items, too.)	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-8	As needed. See "Additional" items below.										
P-9	\$0	\$0	\$0	\$0	\$35,000	\$0	\$0	\$0	\$0	\$0	\$0
P-10	\$0	\$0	\$0	\$0	\$190,000	\$0	\$0	\$0	\$0	\$0	\$0
P-11	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-12	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0
P-13	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-14	\$0	\$0	\$0	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$0
P-15	\$0	\$0	\$0	\$0	\$0	\$195,000	\$0	\$0	\$0	\$0	\$0
P-16	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-17	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-18	As needed. See "Additional" items below.										
P-19	\$0	\$0	\$0	\$0	\$0	\$0	\$75,000	\$0	\$0	\$0	\$0
P-20	\$0	\$0	\$0	\$0	\$0	\$0	\$400,000	\$0	\$0	\$0	\$0
P-21	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-22	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$60,000	\$0	\$0	\$0
P-23	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$223,000	\$0	\$0	\$0
P-24	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0
P-25	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$388,000	\$0	\$0
P-26	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$300,000	\$0
P-27	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$25,000	\$0
P-28	\$0	\$10,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-29	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$190,000
P-30	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$30,000	\$0
P-31	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$203,000
P-32	\$150,000	\$250,000	\$250,000	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-33	\$0	\$250,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-34	\$3,800,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-35	\$0	\$0	\$0	\$25,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-36	\$0	\$0	\$80,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
P-37	As needed. See "Additional" items below.										
TOTAL P	\$4,000,000	\$1,510,000	\$430,000	\$850,000	\$225,000	\$1,215,000	\$475,000	\$488,000	\$588,000	\$555,000	\$593,000
YEARLY TOTAL	\$4,672,200	\$2,405,200	\$1,459,200	\$1,834,200	\$1,131,200	\$2,100,200	\$1,281,200	\$1,335,200	\$1,579,200	\$1,565,200	\$1,604,200

**Table 7-2
IMPLEMENTATION PROGRAM SUMMARIZED BY YEAR
Valley Branch Watershed District**

Item Number	Year										
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Possible Additional Items - Implementation years and costs are estimated. The Managers will review the need for these items during their annual budget setting process.											
ADC-12	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$15,000	\$15,000
Total ADC Additional	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000	\$15,000	\$15,000	\$15,000
A-1	\$0	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0	\$5,000	\$0
A-2	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000	\$0	\$1,000
A-3	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0
A-4	\$0	\$0	\$0	\$20,000	\$0	\$0	\$0	\$0	\$0	\$20,000	\$0
A-5	\$0	\$2,500	\$0	\$2,500	\$0	\$2,500	\$0	\$2,500	\$0	\$2,500	\$0
A-9	\$0	\$2,000	\$0	\$2,000	\$0	\$2,000	\$0	\$2,000	\$0	\$2,000	\$0
A-11	\$0	\$1,000	\$0	\$0	\$0	\$1,000	\$0	\$0	\$0	\$1,000	\$0
A-12	\$1,000	\$0	\$0	\$1,000	\$0	\$0	\$1,000	\$0	\$0	\$1,000	\$0
A-15	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0	\$500	\$0
A-16	\$0	\$5,000	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0
Total A Additional	\$2,000	\$16,000	\$1,000	\$31,000	\$6,000	\$11,000	\$7,000	\$10,000	\$1,000	\$37,000	\$1,000
DC-1	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0	\$5,000
DC-2	\$0	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0	\$5,000	\$0	\$0
DC-4	\$0	\$0	\$0	\$15,000	\$0	\$0	\$0	\$0	\$0	\$0	\$15,000
Total DC Additional	\$0	\$5,000	\$5,000	\$15,000	\$5,000	\$5,000	\$0	\$5,000	\$5,000	\$0	\$20,000
S-1	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0
S-2	\$0	\$0	\$0	\$0	\$0	\$0	\$200,000	\$0	\$0	\$0	\$0
S-5	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$0
Total S Additional	\$0	\$0	\$0	\$100,000	\$5,000	\$0	\$200,000	\$0	\$100,000	\$0	\$0
P-2	\$0	\$0	\$1,000,000	\$0	\$0	\$0	\$0	\$50,000	\$100,000	\$100,000	\$100,000
P-3	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$750,000	\$0	\$0
P-4	\$0	\$0	\$0	\$0	\$50,000	\$0	\$0	\$0	\$0	\$0	\$50,000
P-6	\$0	\$0	\$0	\$0	\$0	\$100,000	\$0	\$0	\$100,000	\$0	\$0
P-7	\$0	\$0	\$0	\$0	\$0	\$10,000	\$0	\$0	\$0	\$0	\$10,000
P-8	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000	\$0	\$0	\$0	\$100,000
P-18	\$0	\$0	\$5,000	\$0	\$0	\$0	\$0	\$0	\$5,000	\$0	\$0
P-37	\$0	\$0	\$0	\$0	\$750,000	\$0	\$0	\$750,000	\$0	\$0	\$750,000
Total P Additional	\$0	\$0	\$1,105,000	\$0	\$800,000	\$110,000	\$100,000	\$800,000	\$955,000	\$100,000	\$1,010,000
TOTAL ADDITIONAL	\$2,000	\$21,000	\$1,111,000	\$146,000	\$816,000	\$126,000	\$307,000	\$830,000	\$1,076,000	\$152,000	\$1,046,000
TOTAL + TOTAL ADDITIONAL	\$4,674,200	\$2,426,200	\$2,570,200	\$1,980,200	\$1,947,200	\$2,226,200	\$1,588,200	\$2,165,200	\$2,655,200	\$1,717,200	\$2,650,200