INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

_____

THIS INTERLOCAL COOPERATION ACT AGREEMENT (hereinafter referred to as "**this Agreement**") is intended to create a voluntary mechanism for the purpose of addressing important subjects of concern to the interested governments (hereinafter referred to as "**the Interested Governments**") situated in whole or part within the watershed of the Papillion Creek (hereinafter referred to as "**the Watershed**"), the Interested Governments consisting of the following governmental entities, to-wit: the **CITY OF BELLEVUE**, Nebraska; the **VILLAGE OF BOYS TOWN**, Nebraska; the **CITY OF GRETNA**, Nebraska; the **CITY OF LAVISTA**, Nebraska; the **CITY OF OMAHA**, Nebraska; the **CITY OF PAPILLION**, Nebraska; the **CITY OF RALSTON**, Nebraska; the **COUNTY OF SARPY**, Nebraska; and, the **PAPIO-MISSOURI RIVER NATURAL RESOURCES DISTRICT**; provided, however, this Agreement is made and entered as an Interlocal Cooperation Act Agreement by and among only those of the Interested Governments which have duly executed this Agreement at the foot hereof, such signatory entities (hereinafter referred to collectively as "**the Parties,**" "**the Papillion Creek Watershed Partnership**" or "**the Partnership**"), thus signifying the intent of the Parties to act, and contribute their resources, as members of the "Papillion Creek Watershed Partnership," which is hereinafter defined and described.

WHEREAS, the Partnership originally was formed through an Interlocal Cooperation Act Agreement dated on August 1, 2001 (hereinafter referred to as the "**Initial Agreement**"), and expiring on July 31, 2004. An Interlocal

Cooperation Act Agreement for Continuation of the Papillion Creek Watershed Partnership was approved by the Parties in 2004, effective July 1, 2004 for a period of five years from and after its effective date.

WHEREAS, the Partnership has accomplished the assessment of existing water quality and quantity conditions, the cooperative preparation of NPDES Phase II Permit applications, the submittal of multiple grant applications, the analysis of additional flood control and the support of storm water utility legislation. The Partnership coordinated these issues at monthly meetings of its members' representatives. The progress of Partnership activities was presented to the public at meetings and on a website (www.papiopartnership.org);

WHEREAS, the Partnership was instrumental in the preparation of the "Partnership NPDES Phase II Storm Water Management Plan" for the Watershed, (hereinafter referred to as the **"SWMP**") a true and correct copy of which is attached to this Agreement as **Exhibit "A"** and incorporated herein by this reference;

WHEREAS, by the members of the Partnership continuing to act in concert and proposing, enacting and implementing common standards, there will be continued increases in effectiveness and in cost-sharing capability within the Partnership, particularly in the capability to implement the SWMP and to address federally-imposed requirements and mandates which are imminent and which must be funded locally;

WHEREAS, other premises that justify the continuation of the Partnership still exist, including, without limitation, that:

- The Papillion Creek does not meet water quality standards specified by the State of Nebraska;
- The City of Omaha has a current Federal mandate to reduce combined sewer overflows;

- The Watershed has not had a major widespread storm event since the 1960's;
- The hydrology of the Watershed for the Flood Insurance Study (late 1970's) is out of date;
- Urbanization of the Watershed and associated impervious area have increased dramatically since the 60's and 70's;
- Deposition is occurring in Watershed reservoirs at unacceptable rates;
- Currently there is inadequate funding to address storm water quantity and water quality problems within the Watershed;
- The benefits of reducing existing and future flood impacts in the Watershed include: decreased public and private property damages, reduced potential loss of life, lower flood insurance costs, decreased cost to taxpayers and public agencies for flood disaster relief;
- Improvement of water quality in streams and reservoirs will result in increased fish, aquatic, and riparian habitat; recreational improvements, reduction of reservoir operation and maintenance costs; and improved aesthetics;
- Potential increased recreational opportunities from the work of the Partnership could include: green spaces (picnic areas, outdoor activities), boating, canoeing, fishing, trail systems, riparian areas for bird watching, nature hikes, education, wildlife viewing, etc.;
- Techniques which could be employed by the Partnership include: implementation of low impact development techniques and other green infrastructure to address stormwater quality and quantity issues; facilitation of multi-use storm water structures; pursuing establishment of stormwater utility enabling legislation; minimization of future fill and

construction in the FEMA-designated floodplain/floodway in the Papillion Creek Watershed; implementing better site design that minimizes impervious surfaces, utilizes techniques to mimic natural hydrology, and approximates pre-development runoff conditions; updating hydrology to 2001 and 2040; formulating a master drainage plan for the Watershed; providing adequate construction and maintenance funding; buy-outs/relocations of structures in flood prone areas; providing increased upstream flood storage; enhancing public education and outreach; implementation of new construction site management practices; development of new development/redevelopment standards; implementation of an illicit discharge program; enhance environmental aspects of public street maintenance; reducing the environmental impacts of herbicide, pesticide, and fertilizer application; developing a water quality and quantity monitoring program; developing an industrial site inspection program; construction of retention/detention ponds designed for both water quantity and quality; restoration, creation and enhancement of wetlands; preservation of riparian areas; environmental restoration of streams; creation of buffer strips; use of grassed swales for drainageways; updating of design and construction standards; application of standardized ordinances/regulations throughout the Watershed; and, implementation of new set back ordinance/regulation and open drainage requirements;

- Standardization of the construction development permit process would reduce liability to landowners from flooding and erosion problems and reduce sediment runoff during construction;

- Continuation of a coordinated effort will improve compliance with federal, state, and local regulations,

WHEREAS, in carrying out its mission, the Partnership will work cooperatively with, but not limited to, the U.S. Army Corps of Engineers, the Metropolitan Area Planning Agency, the USDA Natural Resources Conservation Service, the Nebraska Game and Parks Commission, the Nebraska Department of Environmental Quality, the Nebraska Department of Natural Resources, the University of Nebraska, the University of Nebraska Cooperative Extension, and State and County Health Departments,

WHEREAS, as part of implementing the federally-imposed NPDES requirements where necessary, and to address stormwater management on a watershed-wide basis, a Watershed Management Plan, Implementation Plan and Stormwater Management Policies (hereinafter referred to collectively as the "**Plans and Policies**") were developed through a community-based process involving the development community, Partnership members, public agencies, non-profit organizations, other stakeholder groups and the general public. The Plans and Policies developed through the Partnership consist of six (6) Policy Groups, headed as follows:

#1 Water Quality
#2 Peak Flow Reduction
#3 Landscape Preservation, Restoration, and Conservation
#4 Erosion and Sediment Control and Other BMPs
#5 Floodplain Management
#6 Storm Water Management Financing

and the texts of the Stormwater Management Policies are attached hereto as **Exhibit "B"** and incorporated herein by this reference.

WHEREAS, The Plans and Policies are intended to be adopted, in total, by the respective members of the Partnership, using their respective land use

review and adoption processes (typically reviewed by a Planning Commission or Board and then review and adoption by the elected Board or Council); provided this agreement is not meant to limit any jurisdiction from adopting comparable or more stringent Stormwater Management Policies, regulations, or ordinances.

NOW, THEREFORE, in consideration of the foregoing recitals and their mutual covenants hereinafter expressed, the members of the Partnership agree as follows:

1. **Authority**: This Agreement is an agreement for collective and cooperative action made pursuant to authority provided in the Nebraska Interlocal Cooperation Act (Neb. Rev. Stat. §13-801, R.R.S., 1943, et seq.), without a separate entity being created, and, whenever possible, this Agreement shall be construed in conformity therewith.

2. **Mission**: It shall be the mission of the Partnership to address issues related to surface water quality and storm water quantity in the Watershed by establishing and implementing regionally common goals and standards for the development of the Watershed through 2040.

3. **Applicability**: Members of the partnership having jurisdiction over land area outside the physical boundaries of the Watershed expect and intend that planning activities within the Watershed for projects of the Partnership will, insofar as feasible, apply universally to all such land areas as though they were located physically within the Watershed unless specifically excluded by the respective partnership member.

4. **Goals**: The Partnership shall have as its goals:
   - **a)** Assisting the parties that have NPDES stormwater permits in the implementation of those elements of the SWMP and other programs and projects that are reasonably and feasibly undertaken by collective action of the Partnership;

b) Compliance with Federal, State, and local storm water quality and quantity regulations;

c) Improvement of water quality in the Watershed's streams and reservoirs;

d) Increased water-based recreational opportunities that result from water quality improvements in existing streams and reservoirs and associated improvements in quality of life;

e) Standardization of the construction development process and evaluation of its effectiveness;

f) Assessment and characterization of current water quality and quantity conditions for the watershed;

g) Storm Water Management Plan update;

h) Environmental compliance;

i) Sediment and erosion control;

j) Floodplain management; and,

k) Development of and updates to the Plans and Policies.

5. Executive Committee: The members of the Partnership shall establish an Executive Committee consisting of one representative from each entity that is a member of the Partnership. Each representative shall have one vote and all actions of the Executive Committee shall require a recorded vote. A quorum (at least 50% of members) must be present for any action requiring a vote. Unless otherwise specified, a simple majority of those members present shall be required for approval of any proposed action. It is understood that the authority of each Executive Committee member to act on behalf of his/her respective elected board or council shall be defined by that member's respective board or council. A thirty day notice must be given for any actions requiring a vote to allow Executive

Committee members to seek direction from his/her elected board or council if required.

6. Administering Agent: The Executive Committee designates the Papio-Missouri River Natural Resources District (hereinafter referred to as the "**NRD**"), or other member of the Partnership which is willing to serve in such capacity, as Administering Agent to administer this Agreement. The Administering Agent serves at the pleasure of the Executive Committee and performs duties assigned by the Executive Committee, which may include, without limitation:

a) Seeking any state legislation which a majority of the parties to this Agreement determine necessary to support the work of the Partnership;

b) Designating such personnel and assistance which shall be deemed desirable to support the work of the Partnership;

c) Preparing, presenting and distributing educational materials;

d) Organizing meetings of members of the Partnership and interested persons to share knowledge and compare projects and programs of all involved;

e) In July of each year, set meetings for one year and post those meeting dates to the Partnership website and email to the Partnership members and others.

f) Record each Partnership meeting and prepare written minutes of the action items and record votes for each meeting.

g) Post Partnership meeting agendas 10 days prior to meeting date on Partnership website. Action items may not be added to an agenda following its posting.

h) Preparing reports on the work of the Partnership;

i) Entering into contracts on behalf of the Partnership as the Executive Committee directs for the performance of specific actions consistent with both the goals of this Agreement and the respective missions of members of the Partnership;

j) Holding and maintaining the Partnership Fund, calculating the amount of money necessary to be raised by contributions each year in order to carry out the work of the Partnership, and making requests for contributions from the members of the Partnership, all as the Executive Committee directs;

k) Disbursing the Partnership Fund as directed by the Executive Committee and reimbursing members of the Partnership for expenditures made on behalf of the Partnership or for the reasonable value of activities performed on behalf of the Partnership, as reasonable value is determined by the Executive Committee.

Provided, however, and notwithstanding any provisions of this agreement to the contrary, when a member of the Partnership is acting as the Administering Agent under this Agreement and administering the directions, recommendations and requests of the Executive Committee, the governing body of the Administering Agent has the authority to make such determinations and take and implement such actions as such governing body, in its sole discretion, determines lawful, feasible and reasonable.

7. Implementation. The Partnership intends and agrees that the elements of the SWMP, the Plans and Policies, and other beneficial programs and projects meeting the mission and goals of this Agreement, will be implemented as follows:

a) Responsibility for implementation of an element of the SWMP therein identified solely for individual action by a Partner will rest

with the respective member(s) of the Partnership upon whom the primary duty to implement such element has been imposed by law or regulation. Regulations or ordinances implementing elements of the SWMP and the Plans and Policies will be adopted by each member of the Partnership as appropriate. The provisions of such regulations or ordinances shall indicate the geographic jurisdictional limits to which such regulation or ordinance shall apply. This agreement is not meant to limit any jurisdiction from adopting comparable or more stringent Stormwater Management Policies, regulations, or ordinances.

b) Subject to the availability of funds, implementation of those elements of the SWMP therein identified for action by the Partnership or individual partners and identified in the table attached hereto as **Exhibit "C"** and incorporated herein by reference shall be voluntarily undertaken by the Partnership collectively; provided, however, no voluntary collective undertaking by the Partnership shall be deemed to relieve a member of the Partnership of a primary duty imposed upon such member by law or regulation.

c) Any elements of the SWMP, alternatively, may be voluntarily undertaken by the Partnership collectively if the Executive Committee determines that such course of action is reasonable and feasible.

d) If the Executive Committee determines that such course of action is reasonable and feasible, the Partnership may voluntarily and collectively undertake beneficial programs and projects meeting the mission and goals of this Agreement.

8. Funding: Funding shall be administered as follows:

a) The Partnership Fund, established by the Initial Agreement, shall continue to be held by the Administering Agent in an interest-bearing account in trust for the members contributing thereto, in proportion to their contributions, and shall be expended as the Executive Committee directs to meet the mission and goals of this Agreement, establishing mechanisms for long-term funding and authorization for additional planning and implementation of such programs and projects, and for performance of other activities described in this Agreement. The Partnership Fund shall be funded and administered as follows:

i) On or before the first day of July after the effective date of this Agreement, each member of the Partnership shall make a contribution to the Partnership Fund in the amount shown, opposite such member's name, in the second column of the table attached hereto as **Exhibit "D**" and incorporated herein by reference (such amount hereinafter being referred to as the "**Maximum Annual Contribution**" for such member). For subsequent years during the term of this Agreement, the Administering Agent shall request annual contributions from the members of the Partnership in the amounts necessary to carry out the work of the Partnership, the amounts of such subsequent-year contributions to be determined by the Administering Agent prior to the first day of June of such subsequent year and paid by the members of the Partnership before the first day of July of such subsequent year. These subsequent-year contributions shall be proportional to such members' first year contributions to the Partnership Fund, provided, however, in no case shall any such requested annual

contribution exceed the amount of such member's Maximum Annual Contribution.

ii) Each year during the term of this Agreement, and from time to time as any member of the Partnership may reasonably request, the Administering Agent shall furnish to the members of the Partnership written statements of the condition of the Partnership Fund.

iii) Grants or contributions made by non-members of the Partnership shall not be deemed to offset or diminish the obligations of the members of the Partnership under this Agreement.

iv) If any member of the Partnership fails to contribute to the Partnership Fund as requested pursuant to this Agreement, such member's involvement and membership in the Partnership shall be terminated upon written notice of termination given by the Administering Agent to such member.

b) The Watershed Fund shall be comprised of Watershed Management Fees and NRD general property tax dollars to equitably distribute the capital cost of implementing structural water quality and quantity controls among new development or significant redevelopment within the watershed and to the general public. Based on an initial framework and rates set for Watershed Management Fees (hereinafter referred to as "**Watershed Fees**") defined in Policy Group #6 in the Stormwater Management Policies, the Partnership does hereby agree to implement the Watershed Management Plan and Implementation Plan, , attached hereto as **Exhibit "E"** and **Exhibit "F**" respectively, and both incorporated

herein by reference, or as may be amended in three (3) year increments through provisions in this Agreement, as follows:

i) The cities of BELLEVUE, GRETNA, LAVISTA, OMAHA, PAPILLION and RALSTON, and the County of SARPY (all hereinafter referred to collectively as "**zoning jurisdictions**") agree to collect Watershed Fees from new development or significant redevelopment within the Papillion Creek Watershed, such Watershed Fees to be collected and earmarked specifically for construction of regional detention structures and water quality basins, as follows, to-wit:

   a) Each zoning jurisdiction shall adopt a regulation or ordinance authorizing the collection of the Watershed Fees and authorizing the transfer of such fees to the NRD, consistent with the provisions of this Agreement.

   b) Each zoning jurisdiction shall include, in its subdivision or other agreements with developers for new developments or significant redevelopments, the right to collect Watershed Fees at the time of building permit issuance pursuant to, and consistent with, the provisions of this Agreement. The Watershed Fee specified in a subdivision agreement shall not be changed after such subdivision agreement has been approved by the zoning jurisdiction, notwithstanding that the Watershed Fee framework or rates possibly may be changed before all building construction has been completed in such subdivision.

c) On or before July 1st of each calendar year, each zoning jurisdiction shall remit to the NRD the Watershed Fees paid to or collected by such zoning jurisdiction on or before June 1st of such calendar year. Such Watershed Fees received by the NRD shall be held by the NRD in a separate, interest-bearing account, to be known as the "Watershed Fund," in trust for the members of the Partnership contributing thereto in proportion to their contributions, earmarked specifically for construction by the NRD of regional detention structures and water quality basins and expended by the NRD as further provided in this Agreement.

d) Each zoning jurisdiction shall, in general, adopt a framework consisting of three Watershed Fee classifications, to-wit:

(1) "Single Family Residential Development" (generally consisting of single-family and multi-family dwelling units up to 4-plexes, or as otherwise determined by the zoning jurisdiction). Watershed Fees shall be assessed at an initial rate of $750 per dwelling unit or equivalent prorated average area of lot basis; and,

(2) "High-Density Multi-Family Residential Development" (consisting of other multi-family residential dwelling units determined by the local zoning jurisdiction to represent High density development) shall be assessed at an initial rate of $3,300 per gross acre and shall be

proportionately indexed to “Single Family Residential Development” in terms of the potential to generate stormwater surface runoff. Such “High-Density Development” Watershed Fees shall be 1.25 times “Single Family Residential Development” Watershed Fees when considered on an estimated dwelling unit per gross acre basis.

(3) Commercial/Industrial Development shall be assessed at an initial rate of $4,000 per gross acre and shall be proportionately indexed to “Single Family Residential Development” in terms of the potential to generate stormwater surface runoff. Such Commercial/Industrial Watershed Fees shall be 1.5 times “Single Family Residential Development.”

e) At approximately three (3) year intervals, the Partnership and the development community shall review the Watershed Fees framework and rates, the Watershed Management Plan and the Implementation Plan with respect to availability of needed funds and rate of development within the Watershed. Subsequent changes to the Watershed Fees framework and rates, Watershed Management Plan and Implementation Plan, indicated by such review, shall be subject to formal approval by the respective local zoning jurisdictions and the NRD.

ii) The NRD agrees, subject to the availability of funding, to construct the regional detention structures and water quality basins in accordance with the Watershed Management Plan and Implementation Plan as follows:

a) The NRD shall establish a Watershed Fund and utilize the Watershed Fees received to pay approximately one-third (1/3) of required capital costs of constructing the regional detention structures and water quality basins, including the cost of obtaining necessary land rights. The remaining approximately two-thirds (2/3) of such capital costs shall be paid by the NRD from the proceeds of its general property tax levying authority and from contributions from developers and other cooperators that the NRD may be able to obtain.

9. Title to Property. Title to any tangible property (e.g., monitoring equipment) obtained using funds contributed by members of the Partnership pursuant to this Agreement shall be held in the name of the Administering Agent in trust for the members of the Partnership in proportion to their total contributions to the Partnership Fund and Watershed Fee Fund.

10. Counterparts. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterpart copies of this Agreement, as executed, shall be maintained as part of the records of the Administering Agent.

11. Effective Date: This Agreement shall become effective on August 1, 2009.

12. **Duration of Agreement**: This Agreement shall be in effect for a period of five (5) years from and after its effective date.

13. **Termination**. Involvement of any member of the Partnership with the Partnership, and responsibilities under this Agreement, may be terminated by such member without cause effective upon 60 days written notice to the other members of the Partnership. Termination of a member's involvement with the Partnership pursuant to this Agreement shall not operate to terminate this Agreement nor shall it affect any rights obtained under this Agreement, prior to such notice of termination being given, for costs incurred or moneys advanced, or for actions taken or responsibilities assumed, by another member of the Partnership during the term of and pursuant to this Agreement.

14. **Additional Planning and Implementation**. The members of the Partnership may amend or supplement this Agreement from time to time as may be deemed necessary to provide long-term funding and authorization for additional planning and implementation of beneficial programs and projects to meet the mission and goals of this Agreement.

IN WITNESS WHEREOF, this Agreement is entered into by the members of the Partnership pursuant to resolutions duly adopted by their respective governing boards.

[Signature page(s) next]

INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of Bellevue, Nebraska on this 24th day of September, 2009.

THE CITY OF BELLEVUE, NEBRASKA

BY _____
MAYOR

Attest:

_____
CITY CLERK

CITY OF BELLEVUE INCORPORATED +++ FEB. 23, 1855 SARPY COUNTY, NEBRASKA

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the Village of Boys Town, Nebraska on this 21st day of July, 2009.

THE VILLAGE OF BOYS TOWN, NEBRASKA

BY _____
CHAIRMAN, VILLAGE BOARD

Attest:

_____
VILLAGE CLERK

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of Gretna, Nebraska on this 4th day of July, 2009.

THE CITY OF GRETNA, NEBRASKA

BY Sally L McGuire
MAYOR

Attest:

CITY CLERK

AUG 17 2009

INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of LaVista, Nebraska on this 8th day of October, 2009.

THE CITY OF LAVISTA, NEBRASKA

BY _____
MAYOR

Attest:

Pamela A Buethe
CITY CLERK

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of Omaha, Nebraska on this 27th day of August, 2009.

THE CITY OF OMAHA, NEBRASKA

BY _____
MAYOR

Attest:

_____
CITY CLERK

APPROVED AS TO FORM:

_____ 7-10-09
DEPUTY CITY ATTORNEY

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of Papillion, Nebraska on this 5th day of August, 2009.

THE CITY OF PAPILLION, NEBRASKA

BY _____
MAYOR

Attest:

_____
CITY CLERK

CITY OF PAPILLION CORPORATE SEAL MAY 9, 1883 NEBRASKA

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the City of Ralston, Nebraska on this 1 day of July, 2009.

THE CITY OF RALSTON, NEBRASKA

BY _____
MAYOR

Attest:

_____
CITY CLERK

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the County of Sarpy, Nebraska on this 18th day of August, 2009.

THE COUNTY OF SARPY, NEBRASKA

BY _____
CHAIRPERSON, COUNTY BOARD

DEBRA J. HOUGHTALING, COUNTY CLERK SEAL SARPY COUNTY, NEBRASKA

Attest:

_____
COUNTY CLERK

AMENDED INTERLOCAL COOPERATION ACT AGREEMENT
FOR CONTINUATION OF THE
PAPILLION CREEK WATERSHED PARTNERSHIP

SIGNATURE PAGE

Executed by the Papio-Missouri River Natural Resources District on this 3 day of August, 2009.

PAPIO-MISSOURI RIVER NATURAL
RESOURCES DISTRICT

BY _____
GENERAL MANAGER

Exhibit A

NPDES Phase II Stormwater Management Plan

NPDES Phase II Stormwater Management Plan

#1: Public Education & Outreach

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
1.A	The applicant individually or as a member of the Papillion Creek Watershed Partnership (PCWP) will distribute informational brochures on the proper disposal of household hazardous wastes and the availability of the Household Hazardous Waste facility.	Year 1 – 5: Print and distribute brochures. Include the following in Annual Report: • the quantity of waste received at the drop-off facility; • a summary list of the distribution outlets used for brochures; • an estimate of the brochures distributed each year.
1.B	The applicant individually or as a member of the PCWP will issue public service announcements related to storm water protection on local TV, radio or print outlets.	Year 1 – 5: A summary of the activities will be included in the Annual Report.
1.C	The applicant individually or as a member of the PCWP will continue existing drain marking program to improve public awareness concerning illegal dumping utilizing volunteer services (e.g. Boy Scouts) which will address TMDL pollutants of concern.	Year 1 – 5: Mark approximately 1,000 inlets annually and include a summary in the Annual Report.
1.D	The applicant as a member of the PCWP will hold a Sediment and Erosion Control Seminar for the developers, builders, engineers, vendors, and graders which will address TMDL pollutants of concern.	Year 1 – 5: Annual Sediment and Erosion Control Seminar. Include a summary of the approximate number of participants in Annual Report.
1.E	The applicant individually or as a member of the PCWP will work collaboratively with other community organizations to develop a campaign aimed at picking up pet waste which will address TMDL pollutants of concern.	Year 1: Develop outreach material and partnerships. Year 2 - 5: Distribute information. Provide an estimate of number of brochures distributed and activities targeted.
1.F	The applicant individually or as a member of the PCWP will develop materials and displays associated with BMP demonstration projects installed with Stormwater Management Program Plan funds from NDEQ.	Year 1 -5: Provide a narrative and examples of materials developed in annual report.
1.G	Develop a PCWP Stormwater Program Web Site, including but not limited to storm water related information and provide educational information targeted for residents, children, and industries which will address TMDL pollutants of concern.	Year 1-5: Develop, operate and maintain a PCWP Stormwater Web site. Include a narrative in the Annual Report describing the functions of the website.

1.H	The applicant individually or as a member of the PCWP will utilize the cooperative efforts of the Lower Platte Weed Management Area to address water quality issues associated with purple loosestrife and phragmites where possible.	Year 1-5. Provide a narrative in the annual report that reflects the current infestations and control efforts.

 # 2: Public Participation and Involvement

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
2.A	The applicant individually or as a member of the PCWP will operate a stormwater hotline and web based complaint system for Watershed (general information, complaints, reports of illegal dumping, etc.).	Years 1 - 5: Maintain system operation and include summary of received calls/emails in the Annual Report.
2.B	The applicant individually or as a member of the PCWP will participate in organizing and hold open houses on Papillion Creek Watershed Partnership activities.	Years 1 - 5: A summary of activities will be included in the Annual Report.
2.C	The applicant individually or as a member of the PCWP will continue to implement a stream Cleanup Day. Utilize Keep Omaha Beautiful to identify stream segments in need of cleanup and recruit volunteers from the local area, public groups, and representatives from local area business and developments.	Years 1 – 5: Conduct one clean-up day each year. A summary of the clean-up day activities will be included in the Annual Report.
2.D	The applicant individually or as a member of the PCWP will provide tours of UndertheSink, household hazardous waste facility, for schools and neighborhood organizations to learn about the proper way to manage household chemicals and about stormwater treatment systems installed at the site.	Year 1 – 5: Provide a summary of the tours conducted on an annual basis for the annual report. Document when BMPs are installed and included in the tour.
2.E	The applicant as a member of the PCWP will hold World O! Water Festival focused on elementary school aged children to celebrate Clean Water and engage in water quality related activities.	Year 1-5: Hold event annually. Report estimated number of participants in Annual Report.
2.F	The applicant individually or as member of the PCWP will participate in community organizations, conferences, workshops, and web casts related to water quality and stormwater management.	Year 1- 5: Report number of staff attending, dates, location, and description of events.

 # 3: Illicit Discharge Detection and Elimination

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
3.A	The applicant will perform dry-weather inspections including Physical Characteristics Examinations of storm water outfalls 72" or greater and any outfalls with documented complaints.	Year 1 – 5: Inspect and record observations. Include a count of outfalls inspected in the Annual Report.
3.B	The applicant will investigate and seek resolution concerning any dry weather discharges by notifying the source that they must discontinue discharging, and initiate enforcement action consistent with adopted ordinance which will also address any TMDL pollutants of concern. Any source that the applicant feels constitutes an immediate health or safety threat will be reported immediately to the NDEQ.	Year 1 – 5: The following information will be included in the Annual Report: • the number of process or potentially polluted wastewater sources found; • the number of above resolved at local level; and • the identity of any referred and/or unresolved discharge sources.
3.C	The applicant will perform dry weather inspection of storm water outfalls, including smaller outlets and those that discharge to lesser tributaries or other storm conduits, in response to suspect conditions and/or complaints.	Year 1 – 5: Inspect and record observations. Included a count for outfalls inspected in the Annual Report.
3.D	The applicant will enforce existing ordinances/regulations prohibiting illicit discharge connections to storm sewers.	Year 1 -5: Summarize code violations and enforcement actions taken in annual report.
3.E	The applicant will maintain and prevent instances of sanitary sewer leakage into MS4 or waters of the state.	Year 1 -5: Summarize investigations of leakage and actions taken in Annual Report.
3.F	The applicant will maintain and update a sewer map of major storm water outfalls and identify the names of respective receiving waters.	Years 1 - 5: Map will be maintained electronically on City or County GIS.
3.G	The applicant will prevent, contain and respond to spills in the MS4. Review, as necessary, interdepartmental SOPs with respects to spills, dumping and illegal disposal that impacts the MS4.	Year 1-5: Summarize number of reports of spills and actions taken in Annual Report. Identify respective Department SOP and review date in Annual Report.

 # 4: Construction Site Runoff Control

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
4.A	Maintain the PCWP construction site inspection and reporting web site and continue to make enhancements.	Year 1-5: Include a narrative in the annual report about major web site upgrades and the date implemented.
4.B	The applicant as a member of the PCWP will maintain a construction site inspection program that includes procedures for reporting, resolving deficiencies, and taking appropriate enforcement action consistent with adopted ordinances.	Years 1-5: The Annual Report will contain the following information relative to this commitment: 1) the number of inspections conducted in each of the following size categories: < 5 acres and > 5 acres 2) the number of sites receiving enforcement actions.
4.C	The applicant individually or as a member of the PCWP will maintain regulations and design specifications for controlling erosion, sediment loss, and other TMDL pollutants of concern from construction sites that disturb areas of 1 acre or more.	Year 1 -5: Provide a narrative description of any changes implemented in sediment and erosion control regulations or design specifications in the annual report.
4.D	The applicant individually or as a member of the PCWP will maintain a program for performing review of Grading Permit applications to ensure compliance with applicable regulations and design specifications.	Year 1 -5: Summarize the number of grading permit issued on an annual basis.

 # 5: Post-construction Runoff Control

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
5.A	The applicant individually or as a member of the PCWP will develop a guidance document for Post-Construction Stormwater Management Plan.	Year 2: Develop guidance document for Post Construction Storm water Management Plan Year 2-5: Revise as necessary.
5.B	The applicant individually or as a member of the PCWP will develop a database of existing structural BMPs (private and public) that reduce the impact of urbanization on storm water run-off and improve water quality and enhance other amenities and activities such as green space, parks and recreation, urban planning, aesthetics, and public safety.	Year 2: Coordinate with engineering firms and the NRD to identify existing BMPs and their location. Year 3: Develop a database and GIS map of BMPs.
5.C	The applicant will inspect annually and maintain (as necessary)the MS4 owned storm water BMP structures.	Year 1 -5: List BMPs inspected and summarize maintenance activity in Annual Report.
5.D	The applicant will revise stormwater BMP maintenance and inspection plan as needed.	Year 1-5: Review maintenance plan annually and include new structures. Make revisions as necessary. Report revisions and new structures in Annual Report.
5.E	The applicant individually or as a member of the PCWP will implement strategies, which include a combination of structural and or non-structural BMPs appropriate for the watershed, which will address potential TMDL pollutants of concern. Non-structural BMP's, including improved planning and site design, shall be a priority. Evaluate these strategies and implement changes as necessary to improve water quality and address potential TMDL pollutants of concern.	Year 1 -5: Summarize strategies in the Annual Report.

 # 6: Pollution Prevention/Good Housekeeping for Municipal Operations

BMP #	SWMP Element Description	Measurable Commitments & Implementation Schedule
6.A	The applicant will maintain Stormwater Pollution Prevention Plans (SWPPP) for all the MS4's maintenance facilities to identify BMPs implemented. Review SWPPP annually and update as necessary. If facilities can certify no exposure, review annually to verify no exposure condition exists and document that a SWPPP is not required. Inspect all facilities annually.	Year 1 -2: Develop SWPPP for maintenance facilities. Year 3-5: Review and Revise SWPPP. Summarize efforts in Annual Report.
6.B	The applicant will inspect storm sewer conduits, channels and catch basins and remove and properly dispose of sediment and debris as needed to maintain an efficient system within permitted area.	Year 1 - 5: Report maintenance activities in the Annual Report.
6.C	The applicant individually or as a member of the PCWP will provide training for employees to prevent pollutant runoff from municipal operations at the applicant's maintenance facilities.	Years 1 – 5: Provide training for employees and include summary in Annual Report of when training was held and number of attendees.
6.D	The applicant will provide for street cleaning in the following areas: • Residential • Business • Major Streets • Other areas in conjunction with special projects	Year 1 – 5: Summarize street cleaning activities in Annual Report.
6.F	The applicant's staff that apply pesticides will be trained in a certification program that complies with FIFRA regulations.	Year 1 -5: Report total number of Staff certified each year in the Annual Report.
6.G	The applicant will continue to minimize pesticide and fertilizer use on publically maintained properties.	Year 1 -5: Summarize efforts in Annual Reports.

#8: Storm Water Monitoring Plan

SWMP Element #	SWMP Element Description	Measurable Commitments & Implementation Schedule
8.A	The applicant as a member of the PCWP will conduct in-stream water quality monitoring of named creeks in the Papillion Creek Watershed. Collect samples from at least 4 sites located in the Papillion Creek Watershed. Samples will be collected from May through August one day a week and analyzed for the following parameters: BOD5, TSS, ammonia nitrogen, nitrate-nitrogen, total nitrogen, soluble and total phosphorus, turbidity, pH, E coli, and Physical Characteristic Examinations. The purpose of the monitoring will be to evaluate the effectiveness of storm water management practices in the Papillion Creek watershed as they relate to potential TMDL pollutants of concern. List of potential sites: 170 and Highway 36 (Big Papio) 77th and L Street (Big Papio) 76th and L Street (Little Papio) Ft. Crook Road – USGS station (Papillion Creek)	Year 1- 5: Conduct monitoring The following information shall be included in the Annual Activity Report: • The monitoring data; • A summary report on the findings relative to SWMP efforts; • Any modifications of monitoring locations or procedures.
8.B	The applicant as a member of the PCWP will develop an assessment monitoring plan for demonstration BMPs. Evaluate the effectiveness of the selected BMPs to treat storm water for the TMDL pollutants of concern and other water quality benefits. Consider implementation of refinements to the BMPs, which would improve their effectiveness. One aspect of the monitoring plan will include the collection stream samples on the segment that runs through Orchard Park to establish baseline conditions for BMP assessment purposes. Additionally, the plan will address how the applicant proposed to use stream samples collected in dry weather and wet weather, as described in 8.A above, to estimate the pollutant masses discharged on an event basis and an annual basis.	Year 1 – 2: Visually document and monitor the installation of the demonstration BMPs. Installation is expected to be complete by the end of Year 2. Provide a narrative to report progress in Annual Report. Year 2: Develop the BMP assessment monitoring plan and submit to NDEQ for approval as an attachment to the Annual Report. Years 3 - 5: Conduct monitoring. The following information shall be included in the Annual Activity Report: 1) the location of the monitoring site 2) the intensity and duration of the storm event monitored; 3) the timing of sampling in comparison to the occurrence of the storm event and to the discharge of peak storm water flows; 4) the monitoring data; and 5) a summary report on the findings of the removal rates of the constituents monitored for the BMPs.

Exhibit B

Stormwater Management Policies

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #1: WATER QUALITY IMPROVEMENT

ISSUE: Waters of the Papillion Creek Watershed are impaired.

"ROOT" POLICY: Improve water quality from all contributing sources, including but not limited to, agricultural activities, urban stormwater, and combined sewer overflows, such that waters of the Papillion Creek Watershed and other local watersheds can meet applicable water quality standards and community-based goals, where feasible.

SUB-POLICIES:

1) Water Quality LID shall be required on all new developments and significant redevelopments.
2) Protect surface and groundwater resources from soil erosion (sheet and rill, wind erosion, gully and stream bank erosion), sedimentation, nutrient and chemical contamination. Buffer strips and riparian corridors should be established along all stream segments.
3) Preserve and protect wetland areas to the fullest extent possible to maintain natural hydrology and improve water quality by minimizing the downstream transport of sediment, nutrients, bacteria, etc. borne by surface water runoff. Reestablishment of previously existing wetlands and the creation of new wetlands should be promoted. Any impacted wetlands shall be mitigated at a 3:1 ratio.
4) Support NDEQ in an accelerated TMDL development process that addresses potential pollutant sources in a fair and reasonable manner based on sound technical data and scientific approach.
5) Implement Best Management Practices (BMPs) that reduce both urban and rural pollution sources, maintain or restore designated beneficial uses of streams and surface water impoundments, minimize soil loss, and provide sustainable production levels. Water quality basins shall be located in general conformance with an adopted Papillion Creek Watershed Management Plan.

REFERENCE INFORMATION

DEFINITIONS:

1) Low-Impact Development (LID). A land development and management approach whereby stormwater runoff is managed using design techniques that promote infiltration, filtration, storage, evaporation, and temporary detention close to its source. Management of such stormwater runoff sources may include open space, rooftops, streetscapes, parking lots, sidewalks, medians, etc.
2) Water Quality LID. A level of LID using strategies designed to provide for water quality control of the first ½ inch of stormwater runoff generated from each new development or significant redevelopment and to maintain the peak discharge rates during the 2-year storm event to baseline land use conditions, measured at every drainage (stormwater discharge) outlet from the new development or significant redevelopment.
3) Best Management Practice (BMP). "A technique, measure or structural control that is used for a given set of conditions to manage the quantity and improve the quality of

stormwater runoff in the most cost-effective manner." *[Source: U.S. Environmental Protection Agency (EPA)]*

4) Total Maximum Daily Load (TMDL). A calculation of the maximum amount of a pollutant that a waterbody can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. Water quality standards are set by States, Territories, and Tribes. They identify the uses for each waterbody, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non-point sources. The calculation must include a margin of safety to ensure that the waterbody can be used for the purposes the State has designated. The calculation must also account for seasonal variation in water quality. The Clean Water Act, Section 303, establishes the water quality standards and TMDL programs, and for Nebraska such standards and programs are administered by the Nebraska Department of Environmental Quality. *[Source: EPA and Nebraska Surface Water Quality Standards, Title 117].*

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #2: PEAK FLOW REDUCTION

ISSUE
Urbanization within the Papillion Creek Watershed has and will continue to increase runoff leading to more flooding problems and diminished water quality.

ROOT POLICY
Maintain or reduce stormwater peak discharge during development and after full build-out land use conditions from that which existed under baseline land use conditions.

SUB-POLICY

1) Regional stormwater detention facilities and other structural and non-structural BMPs shall be located in general conformance with an adopted Papillion Creek Watershed Management Plan and shall be coordinated with other related master planning efforts for parks, streets, water, sewer, etc.
2) Maximum LID shall be required to reduce peak discharge rates on all new developments and significant redevelopments as identified in the Papillion Creek Watershed Management Plan.
3) All significant redevelopment shall maintain peak discharge rates during the 2, 10, and 100-year storm event under baseline land use conditions.

REFERENCE INFORMATION

DEFINITIONS

1) Low-Impact Development (LID). A land development and management approach whereby stormwater runoff is managed using design techniques that promote infiltration, filtration, storage, evaporation, and temporary detention close to its source. Management of such stormwater runoff sources may include open space, rooftops, streetscapes, parking lots, sidewalks, medians, etc.
2) Water Quality LID. A level of LID using strategies designed to provide for water quality control of the first ½ inch of stormwater runoff generated from each new development or significant redevelopment and to maintain the peak discharge rates during the 2-year storm event to baseline land use condition, measured at every drainage (stormwater discharge) outlet from the new development or significant redevelopment.
3) Maximum LID. A level of LID using strategies, including water quality LID and on-site detention, designed not to exceed peak discharge rates of more than 0.2 cfs/acre during the 2-year storm event or 0.5 cfs/acre during the 100-year storm event based on the contributing drainage from each site, measured at every drainage (stormwater discharge) outlet from the new development or significant redevelopment.
4) Peak Discharge or Peak Flow. The maximum instantaneous surface water discharge rate resulting from a design storm frequency event for a particular hydrologic and hydraulic analysis, as defined in the Omaha Regional Stormwater Design Manual. The measurement of the peak discharge shall be at the lower-most drainage outlet(s) from a new development or significant redevelopment.

5) Regional Stormwater Detention Facilities. Those facilities generally serving a drainage catchment area of 500 acres or more in size.
6) Baseline Land Use Conditions. That which existed for Year 2001 for Big and Little Papillion Creeks and its tributaries (excluding West Papillion Creek) and for Year 2004 for West Papillion Creek and its tributaries.
7) Full Build-Out Land Use Conditions. Fully platted developable land use conditions for the combined portions of the Papillion Creek Watershed that lie in Douglas and Sarpy Counties that are assumed to occur by the Year 2040, plus the projected 2040 land uses within the Watershed in Washington County; or as may be redefined through periodic updates to the respective County comprehensive plans.

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #3: LANDSCAPE PRESERVATION, RESTORATION, AND CONSERVATION

ISSUE: Natural areas are diminishing, and there is a need to be proactive and integrate efforts directed toward providing additional landscape and green space areas with enhanced stormwater management through restoration and conservation of stream corridors, wetlands, and other natural vegetation.

"ROOT" POLICY: Utilize landscape preservation, restoration, and conservation techniques to meet the multi-purpose objectives of enhanced aesthetics, quality of life, recreational and educational opportunities, pollutant reduction, and overall stormwater management.

SUB-POLICIES:

1) Incorporate stormwater management strategies as a part of landscape preservation, restoration, and conservation efforts where technically feasible.
2) Define natural resources for the purpose of preservation, restoration, mitigation, and/or enhancement.
3) For new development or significant redevelopment, provide a creek setback of 3:1 plus 50 feet along all streams as identified in the Papillion Creek Watershed Management Plan and a creek setback of 3:1 plus 20 feet for all other watercourses.
4) All landscape preservation features as required in this policy or other policies, including all stormwater and LID strategies, creek setbacks, existing or mitigated wetlands, etc., identified in new or significant redevelopment shall be placed into an out lot or within public right of way or otherwise approved easement.

REFERENCE INFORMATION

DEFINITIONS

1) Creek Setback. See Figure 1 below and related definitions in Policy Group #5. A setback area equal to three (3) times the channel depth plus fifty (50) feet (3:1 plus 50 feet) from the edge of low water on both sides of channel shall be required for any above or below ground structure exclusive of bank stabilization structures, poles or sign structures adjacent to any watercourse defined within the watershed drainage plan. Grading, stockpiling, and other construction activities are not allowed within the setback area and the setback area must be protected with adequate erosion controls or other Best Management Practices, (BMPs). The outer 30 feet adjacent to the creek setback limits may be credited toward meeting the landscaping buffer and pervious coverage requirements.

   A property can be exempt from the creek setback requirement upon a showing by a licensed professional engineer or licensed landscape architect that adequate bank stabilization structures or slope protection will be installed in the construction of said structure, having an estimated useful life equal to that of the structure, which will provide adequate erosion control conditions coupled with adequate lateral support so that no portion of said structure adjacent to the stream will be endangered by erosion

or lack of lateral support. In the event that the structure is adjacent to any stream which has been channelized or otherwise improved by any agency of government, then such certificate providing an exception to the creek setback requirement may take the form of a certification as to the adequacy and protection of the improvements installed by such governmental agency. If such exemption is granted, applicable rights-of-way must be provided and a minimum 20 foot corridor adjacent thereto.

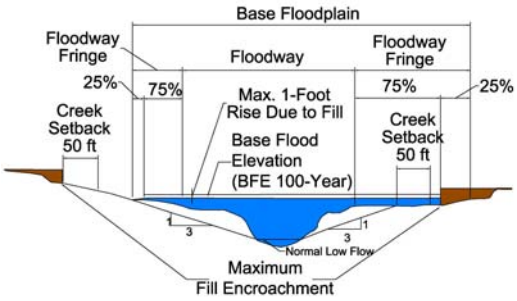


Figure 1 – Floodway Fringe Encroachment and Creek Setback Schematic

DEFINITIONS

1) Base Flood. The flood having a one percent chance of being equaled or exceeded in magnitude in any given year (commonly called a 100-year flood). *[Adapted from Chapter 31 of Nebraska Statutes]*
2) Floodway. The channel of a watercourse and the adjacent land areas that are necessary to be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. *[Adapted from Chapter 31 of Nebraska Statutes].* The Federal Emergency Management Agency (FEMA) provides further clarification that a floodway is the central portion of a riverine floodplain needed to carry the deeper, faster moving water.
3) Floodway Fringe. That portion of the floodplain of the base flood, which is outside of the floodway. *[Adapted from Chapter 31 of Nebraska Statutes]*
4) Floodplain. The area adjoining a watercourse, which has been or may be covered by flood waters. *[Adapted from Chapter 31 of Nebraska Statutes]*
5) Watercourse. Any depression two feet or more below the surrounding land which serves to give direction to a current of water at least nine months of the year and which has a bed and well-defined banks. *[Adapted from Chapter 31 of Nebraska Statutes]*
6) Low Chord Elevation. The bottom-most face elevation of horizontal support girders or similar superstructure that supports a bridge deck.
7) Updated Flood Hazard Maps. The remapping of flooding sources within the Papillion Creek Watershed where Digital Flood Insurance Rate Maps (DFIRMs) are based on 2004 or more recent conditions hydrology and full-build out conditions hydrology. West Papillion Creek and its tributaries are currently under remapping and will become regulatory in 2009. Updating flood hazard maps for Big Papillion Creek and Little Papillion Creek are planned to be completed in the future.
8) New Development. New development shall be defined as that which is undertaken to any undeveloped parcel that existed at the time of implementation of this policy.

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #4: EROSION AND SEDIMENT CONTROL AND OTHER BMPs

ISSUE: Sound erosion and sediment control design and enforcement practices are needed in order to protect valuable land resources, stream and other drainage corridors, and surface water impoundments and for the parallel purpose of meeting applicable Nebraska Department of Environmental Quality regulatory requirements for construction activities that disturb greater than one acre.

"ROOT" POLICY: Promote uniform erosion and sediment control measures by implementing consistent rules for regulatory compliance pursuant to State and Federal requirements, including the adoption of the Omaha Regional Stormwater Design Manual.

SUB-POLICIES:

1) Construction site stormwater management controls shall include both erosion and sediment control measures.

2) The design and implementation of post-construction, permanent erosion and sediment controls shall be considered in conjunction with meeting the intent of other Stormwater Management Policies.

3) Sediment storage shall be incorporated with all regional detention facilities where technically feasible.

REFERENCE INFORMATION

DEFINITIONS

1) Erosion Control. Land and stormwater management practices that minimize soil loss caused by surface water movement.
2) Sediment Control. Land and stormwater management practices that minimize the transport and deposition of sediment onto adjacent properties and into receiving streams and surface water impoundments.

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #5: FLOODPLAIN MANAGEMENT

ISSUE: Continued and anticipated development within the Papillion Creek Watershed mandates that holistic floodplain management be implemented and maintained in order to protect its citizens, property, and natural resources.

"ROOT" POLICY: Participate in the FEMA National Flood Insurance Program, update FEMA floodplain mapping throughout the Papillion Creek Watershed, and enforce floodplain regulations to full build-out, base flood elevations.

SUB-POLICIES:

1) Floodplain management coordination among all jurisdictions within the Papillion Creek Watershed and the Papio-Missouri River Natural Resources District (P-MRNRD) is required.
2) Flood Insurance studies and mapping throughout the Papillion Creek Watershed shall be updated using current and full-build out conditions hydrology.
3) Encroachments for new developments or significant redevelopments within floodway fringes shall not cause any increase greater than one (1.00) foot in the height of the full build-out base flood elevation using best available data.
4) Filling of the floodway fringe associated with new development within the Papillion Creek System shall be limited to 25% of the floodway fringe in the floodplain development application project area, unless approved mitigation measures are implemented. The remaining 75% of floodway fringe within the project area shall be designated as a floodway overlay zone. For redevelopment, these provisions may be modified or waived in whole or in part by the local jurisdiction.
5) The low chord elevation for bridges crossing all watercourses within FEMA designated floodplains shall be a minimum of one (1) foot above the base flood elevation for full-build out conditions hydrology using best available data.
6) The lowest first floor elevation of buildings associated with new development or significant redevelopment that are upstream of and contiguous to regional dams within the Papillion Creek Watershed shall be a minimum of one (1) foot above the 500-year flood pool elevation.

REFERENCE INFORMATION

DEFINITIONS (See Figure 1 below and related definitions in Policy Group #3: Landscape Preservation, Restoration, and Conservation).

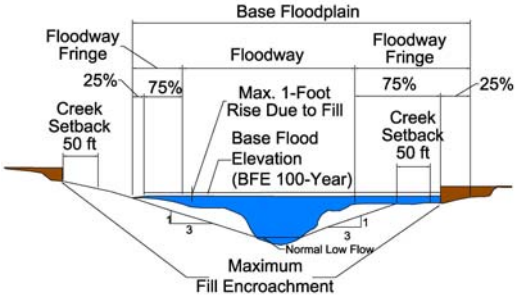


Figure 1 – Floodway Fringe Encroachment and Creek Setback Schematic

1) Base Flood. The flood having a one percent chance of being equaled or exceeded in magnitude in any given year (commonly called a 100-year flood). *[Adapted from Chapter 31 of Nebraska Statutes]*
2) Floodway. The channel of a watercourse and the adjacent land areas that are necessary to be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot. *[Adapted from Chapter 31 of Nebraska Statutes].* The Federal Emergency Management Agency (FEMA) provides further clarification that a floodway is the central portion of a riverine floodplain needed to carry the deeper, faster moving water.
3) Floodway Fringe. That portion of the floodplain of the base flood, which is outside of the floodway. *[Adapted from Chapter 31 of Nebraska Statutes]*
4) Floodplain. The area adjoining a watercourse, which has been or may be covered by flood waters. *[Adapted from Chapter 31 of Nebraska Statutes]*
5) Watercourse. Any depression two feet or more below the surrounding land which serves to give direction to a current of water at least nine months of the year and which has a bed and well-defined banks. *[Adapted from Chapter 31 of Nebraska Statutes]*
6) Low Chord Elevation. The bottom-most face elevation of horizontal support girders or similar superstructure that supports a bridge deck.
7) Updated Flood Hazard Maps. The remapping of flooding sources within the Papillion Creek Watershed where Digital Flood Insurance Rate Maps (DFIRMs) are based on 2004 or more recent conditions hydrology and full-build out conditions hydrology. West Papillion Creek and its tributaries are currently under remapping and will become regulatory in 2009. Updating flood hazard maps for Big Papillion Creek and Little Papillion Creek are planned to be completed in the future.
8) New Development. New development shall be defined as that which is undertaken to any undeveloped parcel that existed at the time of implementation of this policy.

BASIC FEMA REQUIREMENTS

On March 1, 2003, FEMA became part of the U.S. Department of Homeland Security (DHS). In order for a community to participate in the FEMA National Flood Insurance Program, it must first define base flood elevations and adopt a floodway for all its major streams and tributaries. Once a community adopts its floodway, the requirements of *44 CFR 60.3(d)* must be fulfilled. The key concern is that each project in the floodway must receive an encroachment review; i.e., an analysis to determine if the project will increase flood heights or cause increased flooding downstream. Note that the FEMA regulations call for preventing any increase in flood heights. Projects, such as filling, grading or construction of a new building, must be reviewed to determine whether they will obstruct flood flows and cause an increase in flood heights upstream or adjacent to the project site. Further, projects, such as grading, large excavations, channel improvements, and bridge and culvert replacements should also be reviewed to determine whether they will remove an existing obstruction, resulting in increases in flood flows downstream. *[Adapted from Federal Emergency Management Agency guidance]*

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

POLICY GROUP #6: STORMWATER MANAGEMENT FINANCING

ISSUE: Regulatory requirements for stormwater management and implementation of Stormwater Management Policies intended to accommodate new development and significant redevelopment will impose large financial demands for capital and operation and maintenance beyond existing funding resources.

"ROOT" POLICY: Dedicated, sustainable funding mechanisms shall be developed and implemented to meet capital and operation and maintenance obligations needed to implement NPDES Stormwater Management Plans, Stormwater Management Policies, and the Papillion Creek Watershed Management Plan.

SUB-POLICIES:

1) All new development and significant redevelopment will be required to fund the planning, implementation, and operation and maintenance of water quality LID.
2) A Watershed Management Fee system shall be established to equitably distribute the capital cost of implementing the Papillion Creek Watershed Management Plan among new development or significant redevelopment. Such Watershed Management Fee shall only apply to new development or significant redevelopment within the Papillion Creek Watershed and the initial framework shall consist of the following provisions:
    a. Collection of fees and public funding shall be earmarked specifically for the construction of projects called for in the Papillion Creek Watershed Management Plan, including Maximum LID costs such as on site detention, regional detention basins, and water quality basins.
    b. Multiple fee classifications shall be established which fairly and equitably distribute the cost of these projects among all undeveloped areas within the Papillion Creek Watershed.
    c. Watershed Management Fees (private) are intended to account for approximately one-third (1/3) of required capital funds and shall be paid to the applicable local zoning jurisdiction with building permit applications.
    d. Watershed Management Fee revenues shall be transferred from the applicable local zoning jurisdiction to a special P-MRNRD construction account via inter-local agreements.
    e. The P-MRNRD (public) costs are intended to account for approximately two-thirds (2/3) of required capital funds, including the cost of obtaining necessary land rights, except as further provided below; and the P-MRNRD shall be responsible for constructing regional detention structures and water quality basins using pooled accumulated funds.
    f. The P-MRNRD will seek general obligation bonding authority from the Nebraska Legislature to provide necessary construction scheduling flexibility.
    g. Financing for Papillion Creek Watershed Management Plan projects may require public-private partnership agreements between the P-MRNRD and developers/S&IDs on a case-by-case basis.
    h. On approximately three (3)-year intervals, the Papillion Creek Watershed Management Plan and Watershed Management Fee framework, rates, and construction priority schedule shall be reviewed with respect to availability of

needed funds and rate of development within the Papillion Creek Watershed by the parties involved (local zoning jurisdictions, P-MRNRD, and the development community). Subsequent changes thereto shall be formally approved by the respective local zoning jurisdictions and the P-MRNRD.

3) A Stormwater Utility Fee System shall be established to equitably distribute the costs for ongoing operation and maintenance of all stormwater BMPs and infrastructure among all existing property owners within NPDES Phase I or II municipal jurisdictions.
    a. NPDES Phase I and II cities and counties should actively seek legislation from the Nebraska Legislature to allow for the establishment of an equitable stormwater utility fee.
    b. The initial framework for the Stormwater Utility Fee System should consist of the following provisions provided Nebraska statutes allow for such a fee:
        i. A county or city shall establish by resolution user charges to be assessed against all real property within its zoning jurisdiction and may issue revenue bonds or refunding bonds payable from the proceeds of such charges, all upon terms as the county board or city council determines are reasonable.
        ii. Such charges shall be designed to be proportionate to the stormwater runoff contributed from such real property and based on sound engineering principles.
        iii. Such charges should provide credits or adjustments for stormwater quantity and quality BMPs utilized in order to encourage wise conservation and management of stormwater on each property.
        iv. Such charges shall be collected in a manner that the county or city determines as appropriate and shall not be determined to be special benefit assessments.
        v. A county or city shall establish a system for exemption from the charges for the property of the state and its governmental subdivisions to the extent that it is being used for a public purpose. The local elected body shall also provide an appeals process for aggrieved parties.
        vi. A county shall not impose these charges against real property that is being charges user charges by a city.
        vii. Any funds raised from a Stormwater Utility Fee shall be placed in a separate fund and shall not be used for any purpose other than those specified.

REFERENCE INFORMATION

DEFINITIONS

1) Stormwater Management Policies. Stormwater management policies developed by the Technical Workgroup and Policy Workgroup that were commissioned by the Papillion Creek Watershed Partnership (PCWP) subsequent to the “Green, Clean, and Safe” initiatives developed through the “Watershed by Design” public forums conducted in 2004 and 2005 and subsequently revised by the PCWP in 2009. The

following policy groups contain "root" policies and sub-policies for stormwater management that have been developed in addition to the Stormwater Management Financing Policy Group herein:

- Policy Group #1 – Water Quality Improvement
- Policy Group #2 – Peak Flow Reduction
- Policy Group #3 – Landscape Preservation, Restoration, and Conservation
- Policy Group #4 – Erosion and Sediment Control and Other BMPs
- Policy Group #5 – Floodplain Management

2) Stormwater Management Plan (SWMP). A SWMP is a required part of the NPDES Phase II Stormwater Permits issued to many of the Omaha metropolitan area Papillion Creek Watershed Partnership (PCWP) members. Development of Stormwater Management Policies is an integral part of the SWMP, and such policies are to be adopted by respective PCWP partners.
3) Comprehensive Development Plans. Existing plans developed by local jurisdictions that serve as the basis for zoning and other land use regulations and ordinances. The Stormwater Management Policies are to be incorporated into the respective Comprehensive Development Plans.
4) Policy Implementation. The implementation of the policies will be through the development of ordinances and regulations, in years 3 through 5 of the NPDES permit cycle; that is, by the year 2009. Ordinances and regulations are intended to be consistent for, and adopted by, the respective PCWP members. Such ordinances and regulations shall need to be consistent with the Comprehensive Development Plans of the respective PCWP members.
5) Low-Impact Development (LID). A land development and management approach whereby stormwater runoff is managed using design techniques that promote infiltration, filtration, storage, evaporation, and temporary detention close to its source. Management of such stormwater runoff sources may include open space, rooftops, streetscapes, parking lots, sidewalks, medians, etc.
6) Water Quality LID. A level of LID using strategies designed to provide for water quality control of the first ½ inch of stormwater runoff generated from each new development or significant redevelopment and to maintain the peak discharge rates during the 2-year storm event to baseline land use conditions, measured at every drainage (stormwater discharge) outlet from the new development or significant redevelopment.
7) Maximum LID. A level of LID using strategies, including water quality LID and on-site detention, designed not to exceed peak discharge rates of more than 0.2 cfs/acre during the 2-year storm event or 0.5 cfs/acre during the 100-year storm event based on the contributing drainage from each site, measured at every drainage (stormwater discharge) outlet from the new development or significant redevelopment.
8) Baseline Land Use Conditions. That which existed for Year 2001 for Big and Little Papillion Creeks and its tributaries (excluding West Papillion Creek) and for Year 2004 for West Papillion Creek and its tributaries. That which existed in 2007 for all areas not within the Papillion Creek Watershed.

PAPILLION CREEK WATERSHED
STORMWATER MANAGEMENT POLICIES

BASIS FOR STORMWATER MANAGEMENT FINANCING ISSUE

1) Time is of the essence for policy development and implementation:
   a) Under the existing Phase II Stormwater Permits issued by the Nebraska Department of Environmental Quality, permitees must develop strategies, which include a combination of structural and/or non-structural best management practices and incorporate them into existing Comprehensive Development Plans by the end of 2009.
   b) The S&ID platting process is typically several years ahead of full occupation of an S&ID. Therefore, careful pre-emptive planning and program implementation is necessary in order to construct regional stormwater detention and water quality basin improvements in a timely manner to meet the purposes intended and to avoid conflicts from land use encroachments from advancing development.
2) Financing to meet capital and O&M obligations for stormwater management projects requires a comprehensive, uniformly applied approach and not a project-by-project approach.

Exhibit C

Stormwater Management Plan Elements Shared by the Partnership

EXHIBIT C

Stormwater Management Elements Shared by the Partnership

#1 Public Education and Outreach		**Lead Partnership Member(s)**
1.A	**Household Hazardous Waste Public Info**	City of Omaha
1.B	**Public Service Announcements (PSAs)**	P-MRNRD
1.E	**Pet Waste Outreach**	City of Omaha
1.F	**Public BMP Display and Materials**	P-MRNRD
1.G	**Web Site**	City of Omaha
1.H	**Weed Management**	P-MRNRD

#2 Public Participation and Involvement		**Lead Partnership Member(s)**
2.A	**Stormwater Hotline Administration**	City of Omaha
2.B	**Public Meetings**	P-MRNRD
2.C	**Stream and Lake Clean-up Day**	City of Omaha
2.D	**Under the Sink Tours**	City of Omaha

#3 Illicit Discharge Detection and Elimination		**Lead Partnership Member(s)**
3.A	**Storm Water Outlet Inspection**	City of Omaha

#4 Construction Site Runoff Control		**Lead Partnership Member(s)**
4.A	**Maintain Construction Site Reporting Web Site**	City of Omaha
4.B	**Perform Construction Site Inspection**	City of Omaha
4.C	**Maintain Regulations and Design Specifications**	City of Omaha
4.D	**Provide Professional Review of Grading Plans**	P-MRNRD

#5 Post-Construction Runoff Control		**Lead Partnership Member(s)**
5.A	**Develop and Maintain Post-Construction Guidance Document**	City of Omaha
5.B	**Develop and Maintain Database of Post-Construction BMPs**	PMRNRD
5.D	**Maintain Stormwater BMP and Maintenance Plan**	City of Omaha
5.E	**Plan and Implement Structural and Non-structural Stratagies**	P-MRNRD

#6 Pollution Prevention/Good Housekeeping		**Lead Partnership Member(s)**
6.C	**Employee Training Program**	City of Omaha

#7	*Storm Water Monitoring Plan*	**Lead Partnership Member(s)**
7.A	**Outfall Water Quality Monitoring**	City of Omaha
7.B	**Stream Quality Monitoring**	City of Omaha

Exhibit D

Maximum Annual Contribution

EXHIBIT D

Agency	Second Column Initial Contribution	Third Column Percentage
Bellevue	$20,000	5.4%
Boystown	$1,000	0.3%
Gretna	$1,000	0.3%
La Vista	$5,000	1.4%
Omaha	$187,500	43.2%
Papillion	$7,000	1.9%
Ralston	$2,500	0.7%
Sarpy County	$55,000	14.9%
Papio NRD	$90,000	24.4%
TOTALS	$369,000	100.0%

Exhibit E

Watershed Management Plan

Z:\Projects\Papio_NRD\64117_Papio_Stage_IV\map_docs\arcmap\Report\Watershed_Management_Plan.mxd\jan09\jcm

2.5 1.25 0 2.5
Miles

Legend

- Potential Water Quality Basin
- Potential Regional Detention Basins
- Areas with Water Quality LID
- Areas with Maximum LID
- Areas with Water Quality LID and Controlled by Potential Regional Detention Basins
- Areas with Water Quality LID and Controlled by Existing Regional Detention Basins
- Urbanized/Potential Redevelopment Areas
- Papillion Creek Watershed Boundaries
- Creek Setback Segments - 3:1 + 50'
- Streams
- County Lines

Abbreviations

BP - Big Papillion Creek
CL - Cunningham Lake
DS - Dam Site
LP - Little Papillion Creek
RB - Regional Basin
WP - West Papillion Creek
WQ - Water Quality

Big Papillion/ Papillion Creek Watershed
Little Papillion Creek Watershed
West Papillion Creek Watershed
Washington Co.
Douglas Co.
Sarpy Co.
KENNARD
WASHINGTON
BENNINGTON
BOYS TOWN
OMAHA
RALSTON
LA VISTA
PAPILLION
BELLEVUE
GRETNA
Big Papillion Creek
Northwest Branch Papillion Creek
SW Branch Big Papillion Creek
Butterfly Creek
North Branch West Papillion Creek
West Papillion Creek
South Papillion Creek
Thomas Creek
Little Papillion Creek
Cole Creek
Hell Creek
Saddle Creek
Mud Creek
Boxelder Creek
Betz Road Ditch
Papillion Creek
Midland Creek
Newport Landing Lake (Dam Site 6)
Glen Cunningham Lake (Dam Site 11)
Standing Bear Lake (Dam Site 16)
Lake Candlewood (Dam Site 17)
Ed Zorinsky Lake (Dam Site 18)
Wehrspann Lake (Dam Site 20)
Youngman Lake (Dam Site 13)
Whitehawk
Walnut Creek Lake (Dam Site 21)
Shadow Lake
Midland Lake
Dam Site 8A
Dam Site 9A
Dam Site 7
Dam Site 10
Dam Site 15A
Dam Site 12
Dam Site 19
WQ - CL - 1
WQ - CL - 2
WQ - CL - 3
WQ - CL - 4
WQ - CL - 5
WQ - CL - 6
WQ - 15A - 1
WQ - 15A - 2
WQ - Zorinsky 1
WQ - RB5 - 1
WP - RB1
WP - RB2
WP - RB4
WP - RB5
WP - RB6
WP - RB7
WP - RB8
Fort Street
West Maple Road
West Dodge Road
Pacific St
Harrison St
Cornhusker Rd
Q St
168th St
72nd St
120th St
90th St
42nd St
36th St
30
91
133
36
64
6
38
92
31
50
370
75
680
80
275

Source: ArcMap, 9.2

HDR

Watershed Management Plan
Papillion Creek Watershed

Papillion Creek Watershed Partnership
www.papiopartnership.org

Papillion Creek Watershed Plan - Stage IV
Papillion Creek Watershed Partnership

DATE
May 2009

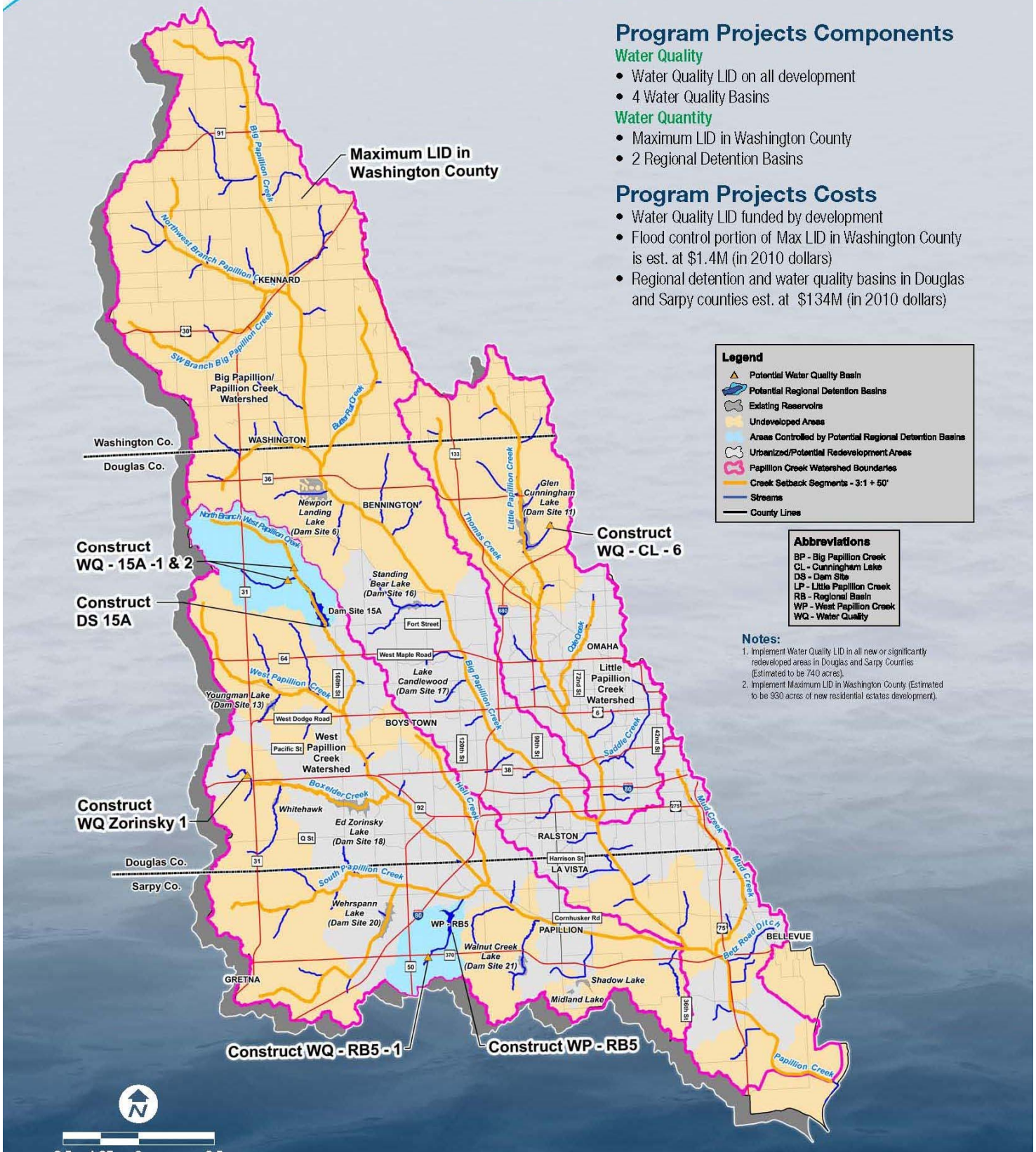
FIGURE
1

Exhibit F

Implementation Plan

Papillion Creek Watershed Partnership

Papillion Creek Watershed Implementation Plan (Years 2011-2013)



Program Projects Components

Water Quality

- Water Quality LID on all development
- 4 Water Quality Basins

Water Quantity

- Maximum LID in Washington County
- 2 Regional Detention Basins

Program Projects Costs

- Water Quality LID funded by development
- Flood control portion of Max LID in Washington County is est. at $1.4M (in 2010 dollars)
- Regional detention and water quality basins in Douglas and Sarpy counties est. at $134M (in 2010 dollars)

Notes:

1. Implement Water Quality LID in all new or significantly redeveloped areas in Douglas and Sarpy Counties (Estimated to be 740 acres).
2. Implement Maximum LID in Washington County (Estimated to be 930 acres of new residential estates development).