

Appendix G

Prioritization

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Projects 1 through 6	Watershed:	Deadmans Run
Project Location:	Deadmans Run main channel, 56th and Holdrege Street to Salt Creek confluence		
Project Description:	Stormwater conveyance projects including widening, floodbenching, and/or vertical retaining walls to increase conveyance within stream channel and lengthen bridges where overbank flooding or bottlenecks are occurring.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 30

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 2

	A = P_{FD} * C_{FF}	60
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Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 50

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 3

	B = P_{ET} * C_{EA}	150
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Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 20

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 3

	C = P_{WQ} * C_{WB}	60
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Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 160

	D = P_{SF}	160
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D **430**

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	20
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	

TOTAL = X + P_{MISC} + P_{AC} **450**

TOTAL for PROJECT CB-1 **450**

Comments or Description of Additional Considerations:

Widening channel will provide opportunity for stream meanders, riffles, and pools, as well as wetland nature areas, all of which stabilize the stream channel and promote water quality.

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	0	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	10	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			20	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 7	Watershed:	Deadmans Run
Project Location:	Seacrest Park, north end		
Project Description:	Modify existing earth berm to potentially avoid floodwaters from reaching habitable buildings by redirecting flow.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 30

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 2

	A = P_{FD} * C_{FF}	60
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Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 0

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 0

	B = P_{ET} * C_{EA}	0
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Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 0

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 0

	C = P_{WQ} * C_{WB}	0
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Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

	D = P_{SF}	60
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D **120**

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	30
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	

TOTAL = X + P_{MISC} + P_{AC} **150**

TOTAL for PROJECT CB-1 **150**

Comments or Description of Additional Considerations:

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	20	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			30	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 8	Watershed:	Deadmans Run
Project Location:	Wyuka Cemetery Existing Detention Pond Retrofit		
Project Description:	Modify existing outlet of the basin to extend the drawdown time during smaller storm events.		
	In addition to the outlet modifications, the existing sediment forebay volume can be increased by adding berm height to the existing grade that separates the basin from the forebay.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor; though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 0

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 0

	A = P_{FD} * C_{FF}	0
		0
		0

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 0

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 0

	B = P_{ET} * C_{EA}	0
		0
		0

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 60

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 3

	C = P_{WQ} * C_{WB}	60
		3
		180

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

	D = P_{SF}	60
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D 240

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	10
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	

TOTAL = X + P_{MISC} + P_{AC} 250

TOTAL for PROJECT CB-1 **250**

Comments or Description of Additional Considerations:

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	0	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			10	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 9	Watershed:	Deadmans Run
Project Location:	Bethany Park New Water Quality BMP		
Project Description:	Convert a portion of the west end of the park into a water quality feature that will treat the Vine Street tributary flow.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 0

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 0

		0
		0
		0

A = P_{FD} * C_{FF}

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 0

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 0

		0
		0
		0

B = P_{ET} * C_{EA}

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 60

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 4

		60
		4
		240

C = P_{WQ} * C_{WB}

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

		60
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D = P_{SF}

Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D 300

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	30
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	
TOTAL = X + P_{MISC} + P_{AC}	330
TOTAL for PROJECT CB-1	330

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

Comments or Description of Additional Considerations:

The west end of the park will be excavated approximately 1 to 6 feet.
 A small culvert installed in the low-flow channel of the existing concrete-lined Vine Street tributary will divert the water quality storm flows and allow larger flood flows to continue to the main channel. The proposed grading would allow treatment of 45 percent of the WQCV.

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	20	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			30	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 10	Watershed:	Deadmans Run
Project Location:	Russwood Dry Detention Pond Retrofit		
Project Description:	Modify the basins' outlet to achieve an appropriate drawdown of the water quality volume. In addition to the outlet modification, the construction of sediment forebays at the two east inlet locations is recommended to provide pretreatment measures.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 0

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 0

	A = P_{FD} * C_{FF}	0
		0
		0

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 0

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 0

	B = P_{ET} * C_{EA}	0
		0
		0

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 60

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 3

	C = P_{WQ} * C_{WB}	60
		3
		180

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

	D = P_{SF}	60
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D **240**

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	10
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	

TOTAL = X + P_{MISC} + P_{AC} **250**

TOTAL for PROJECT CB-1 **250**

Comments or Description of Additional Considerations:

The proposed recommended improvements include the construction of a water quality feature near "A" Street along the Deadmans Run main channel. The area immediately upstream of "A" Street would be excavated approximately 6 feet with gradual side slopes. Over-excavating the area to create a wet pond, if desired, is suitable in this area as baseflow will continually flush the basin avoiding stagnant water. The culvert at "A" Street would be retrofitted with a concrete box weir with a water quality orifice. The weir would back water into the BMP during small storm events and achieve a sufficient drawdown to treat 15 percent of the water quality volume.

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	0	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			10	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 11	Watershed:	Deadmans Run
Project Location:	Trendwood Park Water Quality BMP		
Project Description:	Convert a portion of the west end of the park into a water quality feature that will treat the Vine Street tributary flow.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor; though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 0

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 0

A = P_{FD} * C_{FF}	0
	0
	0

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 0

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 0

B = P_{ET} * C_{EA}	0
	0
	0

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 60

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 4

C = P_{WQ} * C_{WB}	60
	4
	240

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

D = P_{SF}	60
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D 300

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	30
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	
TOTAL = X + P_{MISC} + P_{AC}	330

TOTAL for PROJECT CB-1 330

Comments or Description of Additional Considerations:

The proposed recommended improvements include the construction of a water quality feature near "A" Street along the Deadmans Run main channel. The area immediately upstream of "A" Street would be excavated approximately 6 feet with gradual side slopes. Over-excavating the area to create a wet pond, if desired, is suitable in this area as baseflow will continually flush the basin avoiding stagnant water. The culvert at "A" Street would be retrofitted with a concrete box weir with a water quality orifice. The weir would back water into the BMP during small storm events and achieve a sufficient drawdown to treat 15 percent of the water quality volume.

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	20	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			30	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 12	Watershed:	Deadmans Run
Project Location:	Cotner Boulevard Storm Pipe		
Project Description:	Implementation of a hydrodynamic separator.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}	
Major Structural Flooding Damage		30	
Minor Structural Flooding Damage		20	
Non-Structural Flooding	Streets / ROW, Other	15	
Conservation / Prevention	Easements / Acquisitions	10	
None		0	
P _{FD} =		0	

Flooding Frequency		Multiplier, C _{FF}	
Frequent Flooding	More frequent than 10-year storm	4	
Infrequent Flooding	Less frequent than 10-year storm	2	
None		0	
C _{FF} =		0	

A = P _{FD} * C _{FF}		0
		0
		0

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}	
Channel Erosion Threatening to Structures		50	
Channel Erosion Threatening to Public Infrastructure		40	
Channel Erosion Threatening to Natural Resources		35	
Conservation / Prevention		10	
Stream Stability benefit due to Flood Control or Water Quality Project		10	
None		0	
P _{ET} =		0	

Erosion Activity / Systemic Threat		Multiplier, C _{EA}	
Aggressive Erosion		3	
Non-Aggressive Erosion		2	
None		0	
C _{EA} =		0	

B = P _{ET} * C _{EA}		0
		0
		0

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}	
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60	
Regulatory Compliance / Stormwater Permit / NPDES		60	
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50	
Conservation / Prevention		30	
Water Quality benefit due to Flood Control or Stream Stability Project		20	
None		0	
P _{WQ} =		60	

Project Benefit		Multiplier, C _{WB}	
Major Water Quality Benefit	Broad-Based Impacts	4	
Minor Water Quality Benefit	Localized Impacts	3	
None		0	
C _{WB} =		3	

C = P _{WQ} * C _{WB}		60
		3
		180

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}	
High Risk	Potential Loss of Life or Bodily Injury	160	
Low Risk	Public Nuisance	60	
No Risk		0	
P _{SF} =		60	

D = P _{SF}		60
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Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D 240

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	10	
May Include: Project Location, Coincident Projects, Development Status, etc.		
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0	
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.		
TOTAL = X + P _{MISC} + P _{AC}		250

TOTAL for PROJECT CB-1 250

Comments or Description of Additional Considerations:

The separator would be installed within the existing 60-inch storm pipe located at the intersection of Vine Street and Cotner Street. Small storm events are diverted from the existing pipe into the hydrodynamic separator, which uses a vortex to settle out particulate matter. The separator allows larger flow volumes to bypass the treatment.

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	0	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			10	

Prioritization Ranking for Watershed Master Plan Projects - DRAFT
City of Lincoln, Nebraska

Prepared By:	CDM	Date:	12/6/07
Project ID:	Project 13	Watershed:	Deadmans Run
Project Location:	Herbert Park Stream Stabilization		
Project Description:	Construct grade controls near the pedestrian bridge, grade controls along the tributary length and within the concrete channels, a riprap stilling basin by the second pedestrian bridge, a composite revetment downstream of the bridge, and installing vegetated riprap by the concrete junctions.		

Issues Addressed:

Flooding Impacts

Projects primarily intended to address structural or non-structural flooding will always incorporate a high or low risk safety factor, though typically will not incorporate stream stability or water quality benefits.

Flooding Benefits		Points, P _{FD}
Major Structural Flooding Damage		30
Minor Structural Flooding Damage		20
Non-Structural Flooding	Streets / ROW, Other	15
Conservation / Prevention	Easements / Acquisitions	10
None		0
		P_{FD} = 0

Flooding Frequency		Multiplier, C _{FF}
Frequent Flooding	More frequent than 10-year storm	4
Infrequent Flooding	Less frequent than 10-year storm	2
None		0
		C_{FF} = 0

		0
		0
		0

A = P_{FD} * C_{FF}

Structural and Non-Structural Flooding

Stream Stability

Projects primarily intended for stream stability typically will not incorporate flooding impact benefits; though will incorporate water quality benefits.

Stream Stability Benefit		Points, P _{ET}
Channel Erosion Threatening to Structures		50
Channel Erosion Threatening to Public Infrastructure		40
Channel Erosion Threatening to Natural Resources		35
Conservation / Prevention		10
Stream Stability benefit due to Flood Control or Water Quality Project		10
None		0
		P_{ET} = 35

Erosion Activity / Systemic Threat		Multiplier, C _{EA}
Aggressive Erosion		3
Non-Aggressive Erosion		2
None		0
		C_{EA} = 3

		35
		3
		105

B = P_{ET} * C_{EA}

Open Channel and Surface Erosion

Water Quality

Projects primarily intended for water quality typically will not incorporate flooding impact benefits; though may incorporate stream stability benefits.

Water Quality Benefits		Points, P _{WQ}
Enhance / Preserve Natural Resource Areas (Lake, Wetlands, etc.)		60
Regulatory Compliance / Stormwater Permit / NPDES		60
Create New Natural Resource Areas (Lakes, Wetlands, etc.)		50
Conservation / Prevention		30
Water Quality benefit due to Flood Control or Stream Stability Project		20
None		0
		P_{WQ} = 20

Project Benefit		Multiplier, C _{WB}
Major Water Quality Benefit	Broad-Based Impacts	4
Minor Water Quality Benefit	Localized Impacts	3
None		0
		C_{WB} = 3

		20
		3
		60

C = P_{WQ} * C_{WB}

Water Quality, Wetlands, Natural Habitat

Safety Factor

Public Health and Safety		Points, P _{SF}
High Risk	Potential Loss of Life or Bodily Injury	160
Low Risk	Public Nuisance	60
No Risk		0
		P_{SF} = 60

		60
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D = P_{SF}

Public Health and Safety

Prioritization Ranking Summary

X = A + B + C + D 225

Miscellaneous Factors may be used to adjust scoring:

P _{MISC} (See attached worksheet for description of miscellaneous items)	30
May Include: Project Location, Coincident Projects, Development Status, etc.	
P _{AC} , Additional Considerations (may be used to add or subtract up to 60 points)	0
May Include: Legal Issues, Jurisdictional Coordination, Complaints, Outside Funding Sources, Wildlife Benefits, etc.	
TOTAL = X + P_{MISC} + P_{AC}	255
TOTAL for PROJECT CB-1	255

Project Location, Development Status, Coincident Projects, Condition / Maintenance, Downstream Impacts, Source Reduction, Additional Considerations

Comments or Description of Additional Considerations:

MISCELLANEOUS FACTORS - DRAFT

		Points Available	Points Assigned	
Location	Public Property or willing owner of Private Property	up to 20	20	
Coincident with Adjacent Projects	Public Projects (water, sanitary, roads, etc.)	up to 20	0	
	Private Projects	up to 10	0	
Development Status (Points available are fixed, and are not flexible)	Tier I, Priority A	20		
	Tier I, Priority B	15		
	Tier I, Priority C	10		
	Existing City Limits	10	10	
	Projects primarily intended to address structural	Tier II (development 25 - 50 years)	5	
		Tier III (development > 50 years)	0	
<p>Tier I, Priority A - Areas designated for near term development are generally contiguous to existing development and should be provided first with basic infrastructure within 6 years of the adoption of the Plan. Some of the infrastructure required for development may already be in place. This area includes some land already annexed, with City commitments to fund infrastructure improvements, but the land is still undeveloped and without significant infrastructure in place yet. Some infrastructure improvements may be done in the near term while others, such as road improvements that are generally more costly, may take longer to complete.</p> <p>Tier I, Priority B - The next areas for development, beyond Priority A, are those which currently lack almost all of the infrastructure required to support development. In areas with this designation, the community will maintain present uses until urban development can commence. Infrastructure improvements to serve this area will not initially be included in the City's CIP, but will be actively planned for in the longer term capital improvement planning of the various city and county departments.</p> <p>Tier I, Priority C - This is the later phase of development areas and is intended to be served after Priority A and B. Given current growth rates and infrastructure financing, development would not begin in this area until after 2020 or 2025.</p>				
Total Miscellaneous Points, P_{Misc} =			30	