

**Evaluation Matrix for Erosion Site 1A**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	0	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	0	0	0
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	1	3	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	3	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>13</b>	<b>16</b>	<b>17</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>13</b>	<b>16</b>	<b>17</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	2	1
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	3	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	2	3	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>12</b>	<b>15</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>12</b>	<b>15</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	2	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	2	2	4
Community Disruption	Less disruption the surrounding community and residents scores higher	5	3	0
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>9</b>	<b>8</b>	<b>9</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>11</b>	<b>12</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	0
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	3	4
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	2	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	2	3
<b>Economic Criteria Subtotal</b>		<b>9</b>	<b>10</b>	<b>9</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>14</b>	<b>15</b>	<b>14</b>
<b>Total</b>		<b>51</b>	<b>54</b>	<b>58</b>

**Evaluation Matrix for Erosion Site 1B**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	0	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	0	0	0
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	1	3	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	3	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>13</b>	<b>16</b>	<b>17</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>13</b>	<b>16</b>	<b>17</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	2	1
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	3	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	2	3	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>12</b>	<b>15</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>12</b>	<b>15</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	2	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	2	2	4
Community Disruption	Less disruption the surrounding community and residents scores higher	5	3	1
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>9</b>	<b>8</b>	<b>10</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>11</b>	<b>13</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	0
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	3	4
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	2	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	4	3
<b>Economic Criteria Subtotal</b>		<b>9</b>	<b>12</b>	<b>9</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>14</b>	<b>18</b>	<b>14</b>
<b>Total</b>		<b>51</b>	<b>57</b>	<b>59</b>

**Evaluation Matrix for Erosion Site 2**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	2	3
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	3
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	4	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	2	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	1	3	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>13</b>	<b>16</b>	<b>18</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>13</b>	<b>16</b>	<b>18</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermain, gas, roads) during and after constructions	5	3	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	1	3	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	1	3	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>13</b>	<b>16</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>13</b>	<b>16</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	2	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	2	4
Community Disruption	Less disruption the surrounding community and residents scores higher	5	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>8</b>	<b>8</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>11</b>	<b>11</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	2	2	3
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	3	3
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	2	3	3
<b>Economic Criteria Subtotal</b>		<b>11</b>	<b>11</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>17</b>	<b>17</b>	<b>15</b>
<b>Total</b>		<b>52</b>	<b>56</b>	<b>64</b>

**Evaluation Matrix for Erosion Site 3**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	0	3	2
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	3	2
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	2	5	4
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	5	3
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	2	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>15</b>	<b>21</b>	<b>13</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>15</b>	<b>21</b>	<b>13</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	2	3
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	1	4	3
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	1	4	3
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	3
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	5	3
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	2
Community Disruption	Less disruption the surrounding community and residents scores higher	5	2	3
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>7</b>	<b>11</b>	<b>8</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>9</b>	<b>15</b>	<b>11</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	2	3
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	1	4	3
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	0	4	3
<b>Economic Criteria Subtotal</b>		<b>7</b>	<b>13</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>11</b>	<b>20</b>	<b>15</b>
<b>Total</b>		<b>47</b>	<b>69</b>	<b>51</b>

**Evaluation Matrix for Erosion Site 4**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	0	3	2
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	0	4	3
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	1	5	4
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	2	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	5	4
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>13</b>	<b>22</b>	<b>15</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>13</b>	<b>22</b>	<b>15</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	3	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	1	4	4
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	1	4	4
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	2
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	4	3
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	3
Community Disruption	Less disruption the surrounding community and residents scores higher	5	3	3
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>7</b>	<b>11</b>	<b>9</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>9</b>	<b>15</b>	<b>12</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	0
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	2	1
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	1	3	3
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	5	4
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>13</b>	<b>8</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>20</b>	<b>12</b>
<b>Total</b>		<b>46</b>	<b>70</b>	<b>51</b>

**Evaluation Matrix for Erosion Site 5**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	3	4
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	3
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	2	4	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	1	0
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	4	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	1	0
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>16</b>	<b>15</b>	<b>17</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>16</b>	<b>15</b>	<b>17</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	4	3
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	4	4
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	0	4	4
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>10</b>	<b>15</b>	<b>15</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>10</b>	<b>15</b>	<b>15</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	3	4
Community Disruption	Less disruption the surrounding community and residents scores higher	3	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>5</b>	<b>9</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>7</b>	<b>12</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	2	2
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	1	3	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	3	4
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>11</b>	<b>9</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>17</b>	<b>14</b>
<b>Total</b>		<b>45</b>	<b>59</b>	<b>60</b>

**Evaluation Matrix for Erosion Site 6**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	4
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	4	4
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	5	4
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	4	1
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	0	5	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>12</b>	<b>25</b>	<b>19</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>25</b>	<b>19</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	3	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	1	4	4
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	1	4	4
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	2
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	4	4
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	4
Community Disruption	Less disruption the surrounding community and residents scores higher	4	3	3
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>6</b>	<b>11</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>8</b>	<b>15</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	0
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	3	1
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	1	3	3
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	5	5
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>14</b>	<b>9</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>21</b>	<b>14</b>
<b>Total</b>		<b>44</b>	<b>75</b>	<b>59</b>

**Evaluation Matrix for Erosion Site 7A**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	4
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	4	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	2
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	0	4	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	2
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>12</b>	<b>20</b>	<b>23</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>20</b>	<b>23</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermain, gas, roads) during and after constructions	5	4	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	3	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	0	3	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>10</b>	<b>13</b>	<b>16</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>10</b>	<b>13</b>	<b>16</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	3	4
Community Disruption	Less disruption the surrounding community and residents scores higher	1	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>3</b>	<b>9</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>4</b>	<b>12</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	2	2	2
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	3	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	3	5
<b>Economic Criteria Subtotal</b>		<b>10</b>	<b>11</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>15</b>	<b>17</b>	<b>15</b>
<b>Total</b>		<b>41</b>	<b>62</b>	<b>69</b>



**Evaluation Matrix for Erosion Site 7B**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	4
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	4	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	2
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	0	4	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	2	3
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>12</b>	<b>19</b>	<b>24</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>19</b>	<b>24</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	4	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	3	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	0	3	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>10</b>	<b>13</b>	<b>16</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>10</b>	<b>13</b>	<b>16</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	3	4
Community Disruption	Less disruption the surrounding community and residents scores higher	1	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>3</b>	<b>9</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>4</b>	<b>12</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	2	2	2
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	3	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	3	5
<b>Economic Criteria Subtotal</b>		<b>10</b>	<b>11</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>15</b>	<b>17</b>	<b>15</b>
<b>Total</b>		<b>41</b>	<b>61</b>	<b>70</b>

**Evaluation Matrix for Erosion Site 8**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	3
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	2
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	5	4
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	2
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	2	5	4
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	3	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>14</b>	<b>22</b>	<b>16</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>14</b>	<b>22</b>	<b>16</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermain, gas, roads) during and after constructions	5	2	3
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	1	4	3
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	1	4	3
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	3
<b>Technical and Engineering Criteria Subtotal</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>12</b>	<b>14</b>	<b>12</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	0	5	3
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	2
Community Disruption	Less disruption the surrounding community and residents scores higher	5	2	3
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>6</b>	<b>11</b>	<b>8</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>8</b>	<b>15</b>	<b>11</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	3	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	3	1
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	1	4	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	1	4	4
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>14</b>	<b>8</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>21</b>	<b>12</b>
<b>Total</b>		<b>46</b>	<b>72</b>	<b>51</b>

**Evaluation Matrix for Erosion Site 9A**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	2
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	3	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	3	0
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	0	3	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	2	0
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>12</b>	<b>17</b>	<b>17</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>17</b>	<b>17</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	4	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	5	4
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	0	5	4
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	4	3
<b>Technical and Engineering Criteria Subtotal</b>		<b>10</b>	<b>18</b>	<b>13</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>10</b>	<b>18</b>	<b>13</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	5	3
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	4
Community Disruption	Less disruption the surrounding community and residents scores higher	1	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>3</b>	<b>12</b>	<b>9</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>4</b>	<b>16</b>	<b>12</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	2	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	2	3
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	3	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	0	3	4
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>10</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>15</b>	<b>15</b>
<b>Total</b>		<b>38</b>	<b>66</b>	<b>57</b>

**Evaluation Matrix for Erosion Site 9B**

EVALUATION CRITERIA		Alternative 1 - Do Nothing	Alternative 2 - Local Restoration Works	Alternative 3 - Comprehensive Reach Scale Works
		Score	Score	Score
<b>Physical / Natural Environment Criteria</b>				
Potential to Reduce Stream Bank and Stream Bed Erosion	Greater reduction of erosion risks, slope failures, and loss of public and private properties/parklands	1	4	5
Potential to Reduce Flooding Risks	Greater reduction of localized flooding risks to public and/or private lands for longer time by implementing the alternative scores higher	1	2	2
Potential to Improve Aquatic Habitat	Greater improvements to fish and aquatic habitat scores higher, including substrate, overhanging vegetation, turbidity, and passage/connectivity	0	3	5
Potential Impacts to Aquatic Habitat During Construction	Less disruption to fish and aquatic habitat during construction scores higher	5	2	0
Potential to Improve Terrestrial Habitat	Greater improvements to terrestrial habitat scores higher, including loss and replacement of vegetation and natural corridor connectivity	0	3	5
Potential Impacts to Terrestrial Habitat During Construction	Less disruption to the terrestrial habitat during construction scores higher	5	2	1
<b>Physical / Natural Environment Criteria Subtotal</b>		<b>12</b>	<b>16</b>	<b>18</b>
<b>Weighted Score for Physical / Natural Environment Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>16</b>	<b>18</b>
<b>Technical and Engineering Criteria</b>				
Ease of Implementation	Potential impact to the surrounding infrastructure (e.g., sewers, watermains, gas, roads) during and after constructions	5	4	2
Agency Acceptance	Greater likelihood that regulatory authorities will support the alternative scores higher	0	4	5
City Acceptance	Greater compliance with existing City plans, policies, and bylaw requirements scores higher	0	4	5
Technical Feasibility	Greater technical feasibility relative to other alternatives scores higher	5	3	4
<b>Technical and Engineering Criteria Subtotal</b>		<b>10</b>	<b>15</b>	<b>16</b>
<b>Weighted Score for Technical and Engineering Criteria (maximum of 20 pts)</b>		<b>10</b>	<b>15</b>	<b>16</b>
<b>Social / Cultural Environment Criteria</b>				
Aesthetics / Recreation	Greater improvements to the aesthetics of the creek corridor and how the alternative impacts recreational use of the corridor. Tree plantation and natural looking alternative scores higher	1	3	5
Compatibility with Adjacent Land Use	Greater compatibility with the land use of adjacent properties (e.g., softer approach will be preferred in the residential and parklands compared to hard-engineered structure) scores higher	1	4	4
Community Disruption	Less disruption the surrounding community and residents scores higher	1	3	2
<b>Social / Cultural Environment Criteria Subtotal</b>		<b>3</b>	<b>10</b>	<b>11</b>
<b>Weighted Score for Social / Cultural Environment Criteria (maximum of 20 pts)</b>		<b>4</b>	<b>13</b>	<b>15</b>
<b>Economic Environment Criteria</b>				
Construction Costs	Lower construction cost relative to other alternatives scores higher	5	2	1
Operation and Maintenance Costs	Lower operations and maintenance costs relative to other alternatives scores higher	1	2	3
Life Cycle Costs	Lower life cycle costs relative to the other alternatives scores higher	2	3	2
Infrastructure Protection	Greater protection of existing infrastructure for a longer time scores higher	0	3	4
<b>Economic Criteria Subtotal</b>		<b>8</b>	<b>10</b>	<b>10</b>
<b>Weighted Score for Economic Criteria (maximum of 30 pts)</b>		<b>12</b>	<b>15</b>	<b>15</b>
<b>Total</b>		<b>38</b>	<b>59</b>	<b>64</b>