## **Appendix B: State Post-Construction Stormwater Standards Review Questionnaire and Scoring System**

## Stormwater Climate Review - Basic Information

This form allows the user to review stormwater standards for climate change readiness. Each section focuses on a different aspect of stormwater management. Some key definitions (as used in this form).

"Green Infrastructure Practices" refer to both micro-scale practices such as bioretention, rain gardens or infiltration trenches, as well as landscape scale practices such as rooftop disconnection.

"Better site design" refers to techniques to reduce runoff volume and preserve natural areas during the site design process.

Em	nail *
(1)	State Name
(2)	Name of Document(s) Reviewed
	Document Type (s). Check all that apply
	Stormwater Manual
	Construction Permit
	MS4 Permit
	Other Document

5.	(4) Year Standards were most recently updated
	Mark only one oval.
	Earlier than 2000
	2000-2010
	2010-2020
	After 2020
6.	(5) When/where to the standards apply (Check all that apply)
	Check all that apply.
	Statewide
	Regionally
	New Development
	Redevelopment Other
7.	(6) What is the size threshold to trigger requirements
	Mark only one oval.
	Sites/distrubance <1 acre
	1-5 acres of distrubance
	Other measure
8.	(7) Describe any exceptions to the above standards if applicable.

9.	(8) Please clarify any of the above descriptions if needed	
G	eneral Questions	
10.	(9) Does this stormwater manual or standard include a section or any specific references to climate change, either explicitly or through references about how to adapt to changing weather patterns or "non-stationarity"?	
	Mark only one oval.	
	Yes No	
11.	(10) Do the standards explicitly address or mention sea level rise?	
	Mark only one oval.	
	Yes No	
12.	(11) If it has a climate change section, does this section outline specific design recommendations or requirements to adapt to climate change?	
	Mark only one oval.	
	Yes No	

13.	(12) Does it provide specific guidance for designing and selecting practices, or reference other resources that provide this guidance?
	Mark only one oval.
	Yes
	◯ No
14.	(13) Does it allow for or require the use of Green Infrastructure practices to mee stormwater requirements?
	Mark only one oval.
	Yes
	◯ No
15.	(14) Does it promote or require designers to consider site design features that minimize impervious cover and protect critical natural areas (Environmental Site Design or Better Site Design).
	Mark only one oval.
	Yes
	◯ No

## Design Storm Data and Practice SIzing

This section addresses both the source of design storms used in the standards or manual and the sizing rules incorporated to achieve different water quantity, and hydrologic goals.

16.	(15) Where does the manual get design storm data for Quantity storms from?
	Mark only one oval.
	a) TP-40 (pre-Atlas 14)
	b) Atlas 14
	c) Atlas 14+ (e.g., using storms defined in Atlas 14 and adding increasing storm depths as a factor of safety))
	d) Downscaled or Projected Data
	e) Unknown or not identified
	Other:
17.	(16) Are design storms incorporated by reference (i.e., automatically updated as
	information changes)?
	Mark only one oval.
	Yes
	No
18.	(17) What is the standard for water quantity sizing?
	Mark only one oval.
	a) Match Post-Developed to Pre-Developed conditions (single design storm)
	b) Overcontrol (e.g., reduce peak discharge by 20%)
	c) Match Post-Developed with Future storm to Pre-Developed with Current Storm
	d) Other

19.	(18) Which of these features are incorporated into Water Quantity Sizing (check all that apply)?
	Check all that apply.
	<ul> <li>a) Risk-Based approach (depending on setting or region)</li> <li>b) Continuous models based on existing rainfall patterns or a "typical year" are used to establish targets.</li> <li>c) Continuous models based on projected rainfall patterns (assuming climate change) are used to establish targets.</li> <li>d) Unsure or Unclear</li> </ul>
	Other:
20.	(19) In addition to quantity (flood) control, what other goals are incorporated into standards (check all that apply)?  Check all that apply.  a) Channel Protection b) Water Quality c) Recharge or Runoff Reduction d) Rainwater harvesting
21.	(20) What storm or method is used to provide water quality or runoff reduction (check all that apply)?  Check all that apply.
	<ul> <li>a) None</li> <li>b) 90% (often about 1")</li> <li>c) 1-year</li> <li>d) A short duration storm event (e.g., 5-yr,1-hr)</li> <li>e) Water Quality Target based on long-term modeling or curves.</li> <li>f) Traditional target pollutant (e.g., 80% TP Removal presumed)</li> <li>g) Achieve "Woods in Good Condition" or equivalent.</li> <li>h) Other</li> </ul>
	<i>,</i>

22.	(21) Does water quality/runoff reduction target explicitly account for climate change?
	Mark only one oval.
	Yes No
23.	(22) Does the manual provide guidance on how to size rainwater harvesting systems?
	Mark only one oval.
	Yes
	◯ No
24.	(23) Do BMP Sizing standards vary based on the following (check all that apply)
	Check all that apply.
	<ul><li>a) Water quality of water resources (e.g., phosphorus-restricted basins)</li><li>b) Hydrology of downstream resources (e.g., historic flooding)</li></ul>
	c) Coastal vs non-coastal
	d) Other (specify)
0.5	(00) DI
25.	(23) Please explain any "Other" answers in Section 3

**BMP Selection and Siting** 

26.	(24) Do the standards include a list of acceptable practices?
	Mark only one oval.
	Yes
	No
27.	(25) Do they explicitly prohibit practices that consume water (i.e., practices with a
	permanent pool of water or that may rely on irrigation)?
	Mark only one oval.
	Yes
	○ No
28.	(26) Do standards incorporate any method to encourage the use of Green Infrastructure practices such as a hierarchy or a runoff reduction target that cannot be met without GI?
	Mark only one oval.
	Yes
	○ No
29.	(27) Do standards promote natural areas conservation (methods may include explicit vegetation targets, credits applied for natural areas conservation, or identifying specific areas that are off limits)?
	Mark only one oval.
	Yes
	○ No

30.	(28) Is there a specific credit applied for planting or preserving trees?
	Mark only one oval.
	Yes
	◯ No
31.	(29) Does practice siting account for the following climate change aspects (check all that apply):
	Check all that apply.
	<ul> <li>a) Rising groundwater</li> <li>b) Changing floodplains</li> <li>c) Providing additional "right of way" for practices during large or extreme storms.</li> <li>d) Sea level rise</li> <li>e) Salt water intrusion</li> </ul>
	Other:
32.	(30) Please explain any "Other" answers in Section 4
Un	titled Section
ВМ	IP Storage

33.	(31) For filtering systems, what fraction of the treatment or retention volume needs to be captured in ponding above the filter?
	Mark only one oval.
	a) Not specified
	b) <50%
	c) 50-75%
	( ) >75%
34.	(32) Are "Smart BMP" technologies (i.e., technologies that include sensors and real time adaptation based on observed flows and storm forecasts) incorporated or encouraged?
	Mark only one oval.
	a) Not mentioned or disallowed
	b) Mentioned
	c) Guidance is provided on how or when to use smart technology
35.	(33) Do designs for any practices require or incorporate a "reserve area" to accommodate future conversion (i.e., from infiltration or bioretention practice basin to a wet pond) due to sea level rise?
	Mark only one oval.
	Yes
	No

36.	(34) Do any ultra-urban practices incorporate sub-surface flood storage?
	Mark only one oval.
	Yes
	No
37.	(35) Please explain any "Other" answers in Section 5
Un	titled Section
Со	nveyance and Pretreatment
38.	(36) What storm is used to define the peak flow rate of the WQ or retention storm is conveyed to practices?
	Mark only one oval.
	a) Intensity based on a 24-hour event
	b) Intensity is based on a shorter duration (e.g., 1-hour) event
	c)Identify historic storms that have created design issues and use this distribution.
	Other:

39.	(37) Do the standards for conveyance of the water quality storm incorporate any of the following to account for climate change or conservative design?
	Mark only one oval.
	a) Increase the intensity (e.g., increase by 25%) beyond the amount predicted predicted by a "standard" design storm.
	b) Use a larger storm (e.g., use a 1.5" instead of 1")
	c) Incorporate revised IDF curves based on climate models.
	d) Provide supplemental freeboard or temporary storage in flow diversion structures to ensure that flashy storms do not bypass treatment practices
	e) Other
40.	(38) Does inlet design incorporate design features that limit erosion from high
<del>-</del> 10.	intensity events (check all that apply):
	Check all that apply.
	<ul> <li>a) Detention storage provided at the practice inlet to reduce peak discharges</li> <li>b) Practices designed off-line by using flow-diversion practices</li> <li>c) Prescribe non-erosive conveyance of a specific design storm (identify below)</li> <li>d) Design ensures that the inlet and practice has the capacity to convey intense storm events.</li> </ul>
	Other:
41.	(39) Do the standards require pretreatment?
	Mark only one oval.
	Yes
	No

42.	(40) If flow-based systems are allowed for pretreatment, has their design been modified based on any of the following?
	Mark only one oval.
	a) Increase the intensity by a factor of safety (e.g., 25%) beyond that predicted by a "standard" design storm.
	b) Incorporate revised IDF curves based on climate models.
	c) Other
43.	(41) Are the following accounted for to accommodate rising sea levels:
	Check all that apply.
	a) Elevating outfall inverts to projected high tide
	b) Check valves to prevent backups in outlet pipes
	c) Incorporation of features that allow for future practice modification (e.g., elbow joint in bioretention outlets to allow future elevation of the outlet invert).
	d) Oversizing pipes or open channels to account for lost storage from rising sea levels.
	e) Incorporating pumps or other features that provide increased head during high coastal levels.
	Other:
44.	(42) Is internal water storage (e.g., the "upturned elbow" design incorporated into
	bioretention design standards?
	Mark only one oval.
	Yes
	◯ No

45.	(43) Please explain any "Other" answers in Section 6						
Ма	iterial Selection						
46.	(44) Do filter media specifications include any of the following specifications or additives include options for the following additives?						
	Check all that apply.						
	☐ Minimum % Sand (at least 50%) and maximum clay content ☐ Biochar						
	Polymers designed to retain soil moisture						
	Other:						
47.	(45) Are any of the following considered when selecting BMP materials?						
	Check all that apply.						
	a) Temperature-resistance (e.g., incorporating stone matrix asphalt or polymer-modified binders into permeable pavement specifications)						
	b) Corrosion-resistance, such as use of corrosion-resistant concrete in areas of sea level rise						
	c) Carbon Footprint of materials						
	d) Solar reflection (e.g., incorporating lighter color materials)						

48.	(46) Please explain any "Other" answers in Section 7
Laı	ndscaping and Maintenance
49.	(47) Do standards require ongoing maintenance?
	Mark only one oval.
	Yes
	○ No
50.	(48) Is maintenance informed by field observations (e.g., actions taken based on observed conditions)?
	Mark only one oval.
	Yes
	○ No
51.	(49) Is an irrigation source required to establish vegetation, or informed by analysis?
	Mark only one oval.
	Yes
	○ No

52.	(50) Does maintenance guidance mention adapting to the following?
	Check all that apply.
	a) Drought b) Frequent rainfall/erosive events c) Sea level rise and inundation
53.	(51) Do maintenance standards include a "practice conversion" option for changing climate conditions.
	Mark only one oval.
	Yes
	◯ No
54.	(52) Do standards include a landscaping plant list?
	Mark only one oval.
	Yes
	○ No
55.	(53) Does the plant list identify plants with the following benefits or tolerances?
	Check all that apply.
	a) Tolerance for "wet feet" b) Frequent Inundation tolerance c) Prolonged Drought tolerance d) Salt tolerance e) Fire resistance f) Shading/Cooling

56.	(54) Does the landscaping section suggest methods to modify plant selections based on changing climate conditions?
	Mark only one oval.
	Yes
	○ No
57.	(55) Please explain any "Other" answers in Section 8

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Question	Answer	Modern Manual	High Precipitation	Low Precipitation	High Temperature	Sea Level Rise
(04) Year Standards were most recently updated	Earlier than 2000	0	0	0	0	0
(04) Year Standards were most recently updated	2000-2010	1	0	0	0	0
(04) Year Standards were most recently updated	2010-2020	2	0	0	0	0
(04) Year Standards were most recently updated	After 2020	_		0	0	
		3	0		_	0
(05) When/where to the standards apply (Check all that apply)	Statewide	1	0		0	0
(05) When/where to the standards apply (Check all that apply)	Regionally	0	0	0	0	0
(05) When/where to the standards apply (Check all that apply)	New Development	1	0	0	0	0
(05) When/where to the standards apply (Check all that apply)	Redevelopment	1	0	0	0	0
(05) When/where to the standards apply (Check all that apply)	Other	Flag	0	0	0	0
(06) What is the size threshold to trigger requirements	Sites/Disturbance<1 acre	2				
(06) What is the size threshold to trigger requirements	1-5 Acres of distrubance	1				
(06) What is the size threshold to trigger requirements	Other measure	Flag				
(09) Does this stormwater manual or standard include a section or any specific references to climate change either explicitly or through references about how to adapt to changing weather patterns or "non-stationarity"?	Yes	0	1	1	1	1
(10) Do the standards explicitly address or mention sea level rise?	Yes	0	0	0	0	1
(11) If it has a climate change section does this section outline specific design recommendations or requirements to adapt to	Yes	0	1	1	1	1
(12) Does it provide specific guidance for designing and selecting practices or reference other resources that provide this guidance?	Yes	1	0	0	0	0
(13) Does it allow for or require the use of Green Infrastructure practices to meet stormwater requirements?	Yes	0	0	0	0	0
(14) Does it promote or require designers to consider site design	103				J	
features that minimize impervious cover and protect critical natural areas (Environmental Site Design or Better Site Design).						
(15) Where does the manual get design storm data for Quantity	Yes	1	1	0	1	1
storms from? (15) Where does the manual get design storm data for Quantity	a) TP 40	0	0	0	0	0
storms from?	b) Atlas 14	1	1	0	0	0
(15) Where does the manual get design storm data for Quantity storms from?	c) Atlas 14+ (e.g., using storms defined in Atla	1	2	0	0	0
(15) Where does the manual get design storm data for Quantity storms from?		1	2	0	o	0
(15) Where does the manual get design storm data for Quantity storms from?	e) Unknown or not identified	0	О	0	0	0
(15) Where does the manual get design storm data for Quantity storms from?	f) Other:	"Flag"	"Flag"	0	0	0
(16) Are design storms incorporated by reference (i.e. automatically updated as information changes)?	Yes	1	1	1	0	0
(17)What is the standard for water quantity sizing?	a) Match Post-Developed to Pre-Developed c	0	1	0	0	0
(17)What is the standard for water quantity sizing?					_	0
(17)What is the standard for water quantity sizing?	b) Overcontrol (e.g., reduce peak discharge b				0	0
(17)What is the standard for water quantity sizing?	c) Match Post-Developed with Future storm t	0		0	0	0
(18)Which of these features are incorporated into Water Quantity	d) Other	0	"Flag"	0	0	0
Sizing (check all that apply)? (18)Which of these features are incorporated into Water Quantity	a) Risk-Based approach (depending on setting	0	1	0	0	0
Sizing (check all that apply)? [18]Which of these features are incorporated into Water Quantity	b) Continuous models based on existing rainfo	0	1	0	0	0
Sizing (check all that apply)?  [18]Which of these features are incorporated into Water Quantity	c) Continuous models based on projected rain	0	2	0	0	0
Sizing (check all that apply)?	d) Unsure or Unclear	0	"Flag"	0	0	0
(19) In addition to quantity (flood) control what other goals are incorporated into standards (check all that apply)?	a) Channel Protection	1	1	0	0	0
(19) In addition to quantity (flood) control what other goals are incorporated into standards (check all that apply)?	b) Water Quality	1	1	0	0	0
(19) In addition to quantity (flood) control what other goals are incorporated into standards (check all that apply)?	c) Recharge or Runoff Reduction	1	1	0	0	0
(19) In addition to quantity (flood) control what other goals are incorporated into standards (check all that apply)?	d) Rainwater harvesting	0	0	1	0	0
(20) What storm or method is used to provide water quality or runoff reduction (check all that apply)?	a) None	0			0	0
(20) What storm or method is used to provide water quality or	b) 90% (often about 1")	1	1	0	0	0
runoff reduction (check all that apply)? (20) What storm or method is used to provide water quality or					-	
runoff reduction (check all that apply)? (20) What storm or method is used to provide water quality or	c) 1-year	2	2	0	0	0
runoff reduction (check all that apply)? (20) What storm or method is used to provide water quality or	d) A short duration storm event (e.g., 5-yr,1-h		3	0	0	0
runoff reduction (check all that apply)? (20) What storm or method is used to provide water quality or	e) Water Quality Target based on long-term n	2	2	0	0	0
runoff reduction (check all that apply)?  (20) What storm or method is used to provide water quality or	f) Traditional target pollutant (e.g., 80% TP Re	1	0	0	0	0
runoff reduction (check all that apply)?  [20] What storm or method is used to provide water quality or	g) Achieve "Woods in Good Condition" or equ	1	1	0	0	0
	h) Other	"Flag"	"Flag"	0	0	0

Question (21) Does water quality/runoff reduction target explicitly account	Answer	Modern Manual	High Precipitation	Low Precipitation	High Temperature	Sea Level Rise
for climate change?	Yes	0	1		0	0
(22) Does the manual provide guidance on how to size rainwater		-				-
harvesting systems?	Yes	1	1	. 1	О	0
(23)Do BMP Sizing standards vary based on the following (check all						
that apply)	a) Water quality of water resources (e.g., pho	1	1	1	1	0
(23)Do BMP Sizing standards vary based on the following (check all	b) Hydrology of downstream resources (e.g.,	1	1		0	1
that apply) (23)Do BMP Sizing standards vary based on the following (check all	b) Hydrology of downstream resources (e.g.,	1	_			1
that apply)	c) Coastal vs non-coastal	1	1	. 0	l o	1
(23)Do BMP Sizing standards vary based on the following (check all						
that apply)	d) Other (specify)	"Flag"	"Flag"	"Flag"	"Flag"	"Flag"
(24) Do the standards include a list of acceptable practices?	V					
(25) Do they explicitly prohibit practices that consume water (i.e.	Yes	1	C	0	О	0
practices with a permanent pool of water or that may rely on	Yes	0	c	1	l o	0
(26) Do standards incorporate any method to encourage the use of				_	-	-
Green Infrastructure practices such as a hierarchy or a runoff	Yes	1	1	0	1	1
(27)Do standards promote natural areas conservation (methods						
may include explicit vegetation targets credits applied for natural	Yes	1	1	0	1	1
(28) Is there a specific credit applied for planting or preserving	Yes	1	1	0	1	,
trees? (29)Does practice siting account for the following climate change	res	1	_	0	1	U
aspects (check all that apply):	a) Rising groundwater	0	1		0	1
(29)Does practice siting account for the following climate change	.,					
aspects (check all that apply):	b) Changing floodplains	0	1	0	О	1
(29)Does practice siting account for the following climate change						
aspects (check all that apply):	c) Providing additional "right of way" for prac	0	1	0	0	1
(29)Does practice siting account for the following climate change	d) Soa lovel rice	0		,	0	
aspects (check all that apply): (29)Does practice siting account for the following climate change	d) Sea level rise	0		0	0	1
aspects (check all that apply):	e) Salt water intrusion	0	d	0	o	1
(29)Does practice siting account for the following climate change	-,			-	-	_
aspects (check all that apply):	f) Other: Practice siting may need to take into	"Flag"	"Flag"	"Flag"	"Flag"	"Flag"
(31)For filtering systems what fraction of the treatment or	A N. J. C. C. J.					
retention volume needs to be captured in ponding above the filter?	a) Not specified	0	С	0	O	0
(31)For filtering systems what fraction of the treatment or retention volume needs to be captured in ponding above the filter?	b) <50%	1		,	0	_
(31)For filtering systems what fraction of the treatment or	0) \ \ 30 \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \					0
retention volume needs to be captured in ponding above the filter?	c) 50-75%	1	1	. 0	o	0
(31)For filtering systems what fraction of the treatment or						
retention volume needs to be captured in ponding above the filter?	d) >75%	1	. 2	0	0	0
(32) Are "Smart BMP" technologies (i.e. technologies that include			_			_
sensors and real-time adaptation based on observed flows and	a) Not mentioned or disallowed	0	C	0	0	0
(32) Are "Smart BMP" technologies (i.e. technologies that include sensors and real-time adaptation based on observed flows and	b) Mentioned	0	1	1		0
(32) Are "Smart BMP" technologies (i.e. technologies that include	b) Mentioned	U		-		U
sensors and real-time adaptation based on observed flows and	c) Guidance is provided on how or when to us	0	2	. 2	o	0
(33) Do designs for any practices require or incorporate a "reserve						
area" to accommodate future conversion (i.e. from infiltration or	Yes	0	С	0	0	1
(34)Do any ultra-urban practices incorporate sub-surface flood	V	0		0	0	
storage?	Yes	0	1	U	U	U
(34a) Do standards require an increased depth to groundwater to a	Yes					1
(36) What storm is used to define how the WQ or retention storm						
is conveyed to practices?	a) Intensity based on a 24-hour event	1	1	. 0	o	0
(36) What storm is used to define how the WQ or retention storm						
is conveyed to practices?	b) Intensity is based on a shorter duration (e.	1	. 2	0	0	0
(36) What storm is used to define how the WQ or retention storm	c)Identify historic storms that have created d	1		0	0	,
is conveyed to practices?  (36) What storm is used to define how the WQ or retention storm	chaentily historic storms that have created a	1	2		U	1
is conveyed to practices?	d) Other: Intensity is based on a 24-hour ever	"Flag"	"Flag"	0	0	0
(37) Do the standards for conveyance of the water quality storm	.,	- 0	- 0			
incorporate any of the following to account for climate change or	a) Increase the intensity (e.g., increase by 25%	0	1	. 0	o	0
(37) Do the standards for conveyance of the water quality storm						
incorporate any of the following to account for climate change or	b) Use a larger storm (e.g., use a 1.5" instead	0	1	0	О	0
(37) Do the standards for conveyance of the water quality storm	c) Incorporate revised IDE curves based == ="	0	1	0	0	0
incorporate any of the following to account for climate change or (37) Do the standards for conveyance of the water quality storm	c) Incorporate revised IDF curves based on cli	0	1	0	U	0
incorporate any of the following to account for climate change or	d) Provide supplemental freeboard or tempo	0	1		l o	0
(37) Do the standards for conveyance of the water quality storm						
incorporate any of the following to account for climate change or	e) Other	0	"Flag"	0	О	0
(38) Does inlet design incorporate design features that limit erosion						
from high intensity events (check all that apply):	a) Detention storage provided at the practice	1	1	0	0	0
(38) Does inlet design incorporate design features that limit erosion			1	0	0	0
	h) Practices designed off-line by using flamed:	- 1			U	0
from high intensity events (check all that apply):  (38) Does inlet design incorporate design features that limit erosion	b) Practices designed off-line by using flow-di	1	-			Ι
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):	b) Practices designed off-line by using flow-di     c) Prescribe non-erosive conveyance of a sper			0	o	0
(38) Does inlet design incorporate design features that limit erosion				0	O	0
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):			1	0		1
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion	c) Prescribe non-erosive conveyance of a spee d) Design ensures that the inlet and practice I	1	1	0	0	1
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):	c) Prescribe non-erosive conveyance of a spe	1	1			1
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion	c) Prescribe non-erosive conveyance of a spee d) Design ensures that the inlet and practice l e) Other	1 1 "Flag"	1 "Flag"	0	0	0
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (39)Do the standards require pretreatment?	c) Prescribe non-erosive conveyance of a spee d) Design ensures that the inlet and practice I	1	1 "Flag"	0	0	0
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):	c) Prescribe non-erosive conveyance of a spee d) Design ensures that the inlet and practice l e) Other	1 1 "Flag"	1 "Flag"	0	0	0 0 0
(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply): (39)Do the standards require pretreatment? (40)If flow-based systems are allowed for pretreatment has their	c) Prescribe non-erosive conveyance of a spee d) Design ensures that the inlet and practice I e) Other	1 1 "Flag"	1 "Flag"	0 0	0	0 0 0
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(38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):  (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):  (38) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):  (39) Does inlet design incorporate design features that limit erosion from high intensity events (check all that apply):  (39)Do the standards require pretreatment?  (40)If flow-based systems are allowed for pretreatment has their design been modified based on any of the following?  (40)If flow-based systems are allowed for pretreatment has their design been modified based on any of the following?  (40)If flow-based systems are allowed for pretreatment has their design been modified based on any of the following?  (41)Are the following accounted for to accommodate rising sea levels:	c) Prescribe non-erosive conveyance of a speed d) Design ensures that the inlet and practice I e) Other  Yes a) Increase the intensity by a factor of safety b) Incorporate revised IDF curves based on cli	1 "Flag" 1 0	"Flag"	0 0 0 0 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 1 0 0 0 0 0
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Question	Answer	Modern Manual	High Precipitation	Low Precipitation	High Temperature	Sea Level Rise
(41)Are the following accounted for to accommodate rising sea						
levels:	c) Incorporation of features that allow for fut	0	0	0	0	1
(41)Are the following accounted for to accommodate rising sea						
levels:	d) Oversizing pipes or open channels to accou	0	0	0	0	1
(41)Are the following accounted for to accommodate rising sea						
levels:	e) Incorporating pumps or other features that	0	0	0	0	1
(41)Are the following accounted for to accommodate rising sea						
levels:	f) Other	0	0	0	0	"Flag"
(42)Is internal water storage (e.g. the "upturned elbow†design						
incorporated into bioretention design standards?	Yes	1	0	1	0	1
(44) Do filter media specifications include any of the following						
specifications or additives include options for the following	Minimum % Sand (at least 50%) and maximur	1	1	0	0	0
(44) Do filter media specifications include any of the following						
specifications or additives include options for the following	Biochar	0	1	1	1	0
(44) Do filter media specifications include any of the following						
specifications or additives include options for the following	Polymers designed to retain soil moisture	0	0	1	1	0
(44) Do filter media specifications include any of the following						
specifications or additives include options for the following	Other	0	"Flag"	"Flag"	0	0
(45) Are any of the following considered when selecting BMP						
materials?	a) Temperature-resistance (e.g., incorporating	0	0	0	1	0
(45) Are any of the following considered when selecting BMP						
materials?	b) Corrosion-resistance, such as use of corros	0	0	0	0	1
(45) Are any of the following considered when selecting BMP						
materials?	c) Carbon Footprint of materials	0	1	1	1	1
(45) Are any of the following considered when selecting BMP						
materials?	d) Solar reflection (e.g., incorporating lighter	0	0	0	1	0
(45) Are any of the following considered when selecting BMP						
materials?	e) Other					
(47) Do standards require ongoing maintenance?						
(47) Do standards require origoning maintenance:	Yes	1	1	1	1	1
(48)Is maintenance informed by field observations (e.g. actions						
taken based on observed conditions)?	Yes	1	1	1	1	1
(49) Is an irrigation source required to establish vegetation or						
informed by analysis?	Yes	1	0	1	0	0
(50) Does maintenance guidance mention adapting to the						
following?	a) Drought	0	0	0	0	0
(50) Does maintenance guidance mention adapting to the						
following?	b) Frequent rainfall/erosive events	0	0	0	0	0
(50) Does maintenance guidance mention adapting to the						
following?	c) Sea level rise and inundation	0	0	0	0	0
(51) Do maintenance standards include a "practice conversion" option	Yes	0	0	0	0	1
(52) Do standards include a landscaping plant list?						
, ,	Yes	1	0	0	0	0
(53) Does the plant list identify plants with the following benefits or						
tolerances?	a) Tolerance for "wet feet"	0	1	0	0	1
(53) Does the plant list identify plants with the following benefits or						
tolerances?	b) Frequent Inundation tolerance	0	1	0	0	0
(53) Does the plant list identify plants with the following benefits or						
tolerances?	c) Prolonged Drought tolerance	0	0	1	1	0
(53) Does the plant list identify plants with the following benefits or						
tolerances?	d) Salt tolerance	0	0	0	0	1
(53) Does the plant list identify plants with the following benefits or						
tolerances?	e) Fire resistance	0	0	1	1	0
(53) Does the plant list identify plants with the following benefits or						
tolerances?	f) Shading/Cooling	0	0	0	1	0
(54) Does the landscaping section suggest methods to modify plant						
selections based on changing climate conditions?	Yes	0	1	1	1	1
	Maximum Total Score	40	54	20	18	31