

## STORMWATER IMPACT ASSESSMENT REVIEWER'S CHECKLIST

Project Name: \_\_\_\_\_ Document Type: \_\_\_\_\_  
 Site Location: \_\_\_\_\_ Watershed Name: \_\_\_\_\_

### STEP 1: COLLECT PERTINENT DATA

Instructions: Review the document for pertinent data using the following tables as a guide to information that is often helpful in understanding site and watershed conditions.

#### HYDROLOGY

	Site			Watershed		
	Y	N	N/A	Y	N	N/A
<b>Basic Info</b> – Site size – Watershed or sub-watershed name – Watershed or sub-watershed boundary and area						
<b>Land Use and Land Cover</b> – Existing land use and land cover – Impervious surfaces – Vegetation types – Evapotranspiration and interception transpiration (vegetation)						
<b>Soil and Topography</b> – Soil types – Hydrological soil groups – Slope and topography – Highly erodible soils (NRCS)						
<b>Hydrologic Features</b> – Drainageways – Perennial, intermittent, and ephemeral stream channels – Existing data on peak flows and stream flows – Wetlands, embayments, ponds – Coastal waterbodies – Sensitive ecosystems in receiving waters – Aquifer name and sustainable yield						
<b>Drainage and Flooding</b> – Depth to water table – Direction of subsurface flows – Underground injection control line – Existing stormwater infrastructure – Floodplain and FEMA flood hazard zones – Average annual rainfall and seasonal distribution – Rainfall intensity						

#### STRESSORS (WATER QUALITY AND POLLUTANTS)

	Site			Watershed		
	Y	N	N/A	Y	N	N/A
<b>Pollutants</b> – Presence of contaminated soils – Brownfield or CERCLA site						
<b>Water Quality</b> – Impaired or threatened (303(d) list) waterbodies <i>immediately adjacent</i> to site or <i>receiving runoff</i> from site o Have TMDLs been developed? – Quality and classifications of waterbodies <i>within, immediately adjacent to, or receiving runoff</i> from site						
<b>Other Stressors</b> – Level of habitat fragmentation						

## STORMWATER IMPACT ASSESSMENT REVIEWER'S CHECKLIST

### Step 1 (Continued): Collect Pertinent Data

#### SENSITIVITY OF RESOURCES

	Site			Watershed		
	Y	N	N/A	Y	N	N/A
<b>Aquatic Resources</b> – Native fish, mollusks, crustaceans, and/or insects. – Exceptional habitat quality. – Low flushing capacity or high freshwater input – Anchialine ponds, or low-salinity nearshore coastal waters						
<b>Riparian Resources</b> – Wetlands, bird habitat, native plants						
<b>Cultural Resources</b> – Archaeological resources, historic sites, taro cultivation (historical and on-going)						
<b>Recreational Resources</b> – Boating, camping, fishing, hunting, nature study, parks, scenic views, swimming						
<b>Agricultural Demand</b> – Water diversions and volume diverted						
<b>Aquifer</b> – Sole source aquifer						

#### MANAGEMENT CONSIDERATIONS

	Site			Watershed		
	Y	N	N/A	Y	N	N/A
Marine Reserves and Protected Areas						
Water Quality Standards/Classification						
Within jurisdiction of a public entity subject to an NPDES Municipal Separate Storm System (MS-4) permit?						
Is the site subject to City and County of Honolulu stormwater LID requirements?						
Is the site subject to Maui County stormwater quality requirements?						
Will the action be subject to an NPDES Permit?						
Will the action be subject to a County Grading Permit?						
Hawaii Coral Reef Strategy/Local Action Strategy Priority Site						
Presence of threatened or endangered species or their critical habitat						
Other? List below.						

#### INTENSITY OF PROPOSED ACTION

	Site			Watershed		
	Y	N	N/A	Y	N	N/A
Proposed land use(s)						
Is there an estimate of the area (in square feet or acres) of new impervious surfaces?						
Are anticipated permits identified (i.e. NPDES, grading)?						

## STORMWATER IMPACT ASSESSMENT REVIEWER'S CHECKLIST

### STEP 2: LEVEL OF ANALYSIS

Instructions: Determine if the document includes an analysis of stormwater impacts sufficient to consider stressors, sensitivity, and development intensity.

Level of Analysis	Y	N
Was a planning-level analysis conducted (i.e. discussion of pertinent data in Step 1 and potential impacts)?		
Is a preliminary estimate of runoff volume included?		
Were other detailed analyses conducted (i.e. simple method, modeling)?		
Based on the management considerations identified in Step 1, does level of analysis conducted for this review consider stressors, sensitivity and development intensity?		
Notes:		

### STEP 3: ANALYZE BACKGROUND INFORMATION IN LIGHT OF THE PROPOSED ACTION.

Instructions: Determine if the background information collected was analyzed to consider the project's primary, secondary, and cumulative impacts

Primary (Direct) Impacts	Y	N
Are construction impacts analyzed?		
Are long-term impacts analyzed?		
Notes:		
Secondary Impacts	Y	N
Is flooding potential analyzed? Are down gradient flood zones identified? If area is not mapped, is down gradient flood risk evaluated?		
Are impacts to down gradient resources analyzed?		
Notes:		
Cumulative Impacts	Y	N
Are aggregate past, present and reasonably foreseeable future actions analyzed?		
Notes:		

## STORMWATER IMPACT ASSESSMENT REVIEWER'S CHECKLIST

### STEP 4: IDENTIFY MITIGATION GOALS AND STRATEGIES

Instructions: Determine if the project action avoids negative impacts through design; or, if negative impacts are anticipated if mitigation goals and strategies are documented.

	Y	N
Does the project avoid negative impacts?		
If negative impacts are anticipated, are mitigation goals articulated for each of the following?		
Primary impacts		
Secondary impacts		
Cumulative impacts		
Have BMP strategies been identified to achieve mitigation goals for each of the following?		
Primary impacts		
Secondary impacts		
Cumulative impacts		
Do the BMP strategies account for site and watershed conditions?		

### STEP 5: SUMMARIZE IMPACTS AND MITIGATION APPLICABLE TO THE PROJECT

Instructions: Complete the following table based on information in the environmental document.

Impacts (-)	BMP or Mitigation Measure (+)	Result (avoid, minimize or restore/replace/compensate)
<b>Primary</b>		
<b>Secondary</b>		
<b>Cumulative</b>		

## STORMWATER IMPACT ASSESSMENT REVIEWER'S CHECKLIST

### SUMMARY CHECKLIST

Instructions: Complete the following summary based on your review of the document. Use this summary to make an evaluation of the adequacy of the EA/EISs description and analysis of stormwater impacts and mitigation measures.

#### PERTINENT DATA

The EA/EIS includes sufficient data on:

- |  |  |
|--|--|
| <input type="checkbox"/> Hydrology – Site      | <input type="checkbox"/> Sensitivity of Resources  |
| <input type="checkbox"/> Hydrology – Watershed | <input type="checkbox"/> Management Considerations |
| <input type="checkbox"/> Stressors – Site      | <input type="checkbox"/> Development Intensity     |
| <input type="checkbox"/> Stressors – Watershed |  |

#### LEVEL OF ANALYSIS

- The EA/EIS includes an analysis of stormwater impacts sufficient to consider stressors, sensitivity and development intensity.

#### ANALYSIS ADEQUACY

The EA/EIS adequately analyzes:

- |  |   |
|--|---|
| <input type="checkbox"/> Construction impacts    | <input type="checkbox"/> Impacts to down gradient resources                                 |
| <input type="checkbox"/> Long-term impacts       | <input type="checkbox"/> Aggregate past, present, and reasonably foreseeable future actions |
| <input type="checkbox"/> Flooding potential/risk |   |

#### MITIGATION GOALS AND STRATEGIES

- The project design avoids negative impacts.
- The EA/EIS identifies mitigation goals for primary, secondary, and cumulative impacts.
- The EA/EIS identifies appropriate BMP strategies.
- The identified BMP strategies adequately account for site and watershed conditions.

#### SUMMARY

- The result (avoid, minimize, restore/replace/compensate) of the mitigation measures is appropriate for the identified impacts.

**Notes:**