

# HMP Sizing Calculator

## Example Screenshots

### A) Sizing Calculator – Drainage Basin Details

List	Detail	Channel	
Basin Name:	<input type="text" value="Workshop Demo #1"/>	Receiving Water:	<input type="text" value="San Diego River"/>
Rainfall Basin:	<input type="text" value="Lindbergh Field"/>	Mean Annual Precipitation (in):	<input type="text" value="9.8"/>
Drainage Soil:	<input type="text" value="Type D (high runoff - clay soils)"/>	Drainage Area (ac):	<input type="text" value="10.00"/>
Basin Slope:	<input type="text" value="Moderate (5 - 10%)"/>	Impervious (%):	<input type="text" value="0.00"/>
		2-Year Design Flow (cfs):	<input type="text" value="1.04"/>
		10-Year Design Flow (cfs):	<input type="text" value="2.65"/>

Project Site Information			
Name:	<input type="text" value="LID Site Design Example"/>	Description:	<input type="text" value="Fill in with actual site information"/>
Applicant:	<input type="text"/>	Street:	<input type="text"/>
Status:	<input type="text"/>	City:	<input type="text"/>
Jurisdiction:	<input type="text" value="City of San Diego"/>	Zip:	<input type="text"/>
Hydrological Unit:	<input type="text" value="Pueblo San Diego"/>	State:	<input type="text"/>
Parcel (APN):	<input type="text"/>		

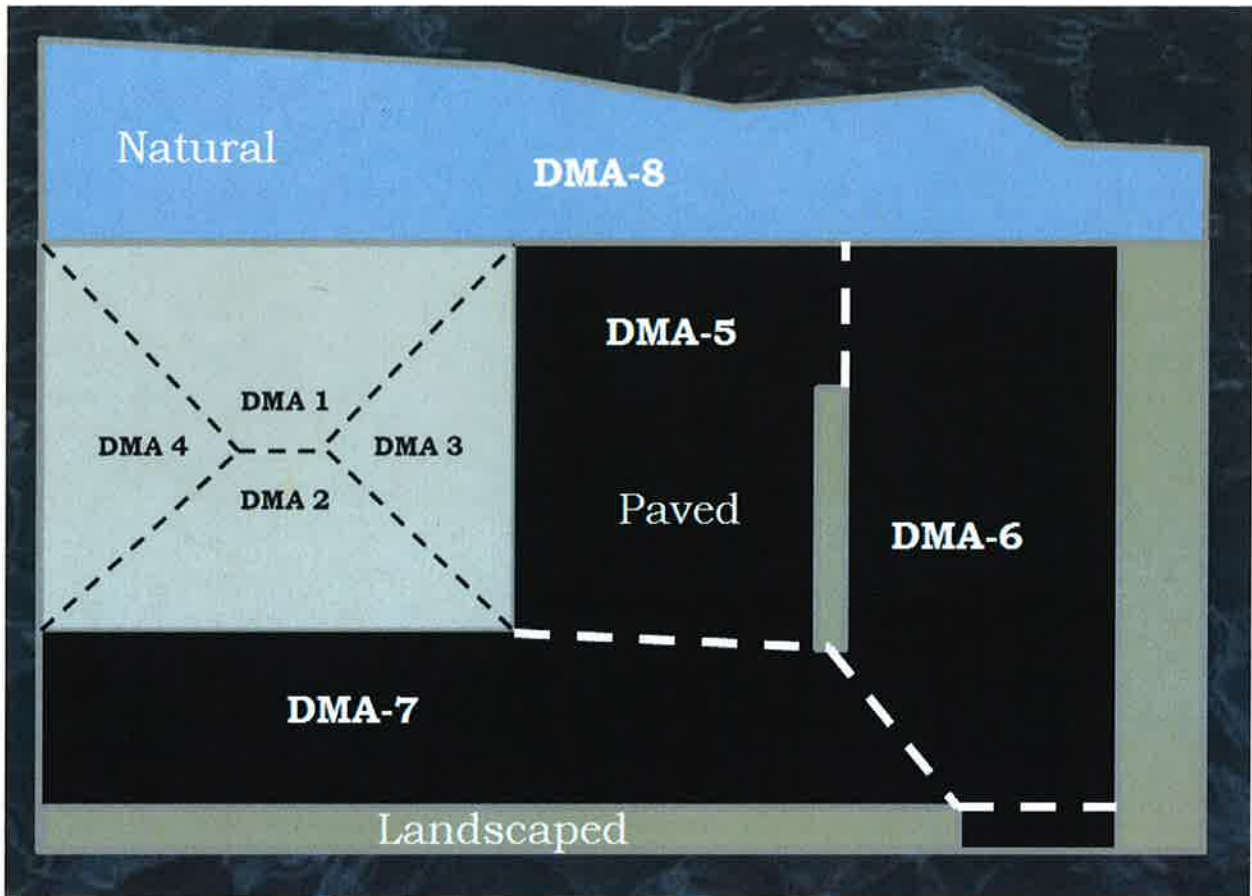
### B) Sizing Calculator – Channel Analysis

List	Detail	Channel	
Basin Name:	<input type="text" value="Workshop Demo #1"/>	Receiving Water:	<input type="text" value="San Diego River"/>
Rainfall Basin:	<input type="text" value="Lindbergh Field"/>	Mean Annual Precipitation (in):	<input type="text" value="9.8"/>
Drainage Soil:	<input type="text" value="Type D (high runoff - clay soils)"/>	Drainage Area (ac):	<input type="text" value="10.00"/>
Basin Slope:	<input type="text" value="Moderate (5 - 10%)"/>	Impervious (%):	<input type="text" value="0.00"/>
		2-Year Design Flow (cfs):	<input type="text" value="1.04"/>
		10-Year Design Flow (cfs):	<input type="text" value="2.65"/>

Project Site Information			
Name:	<input type="text" value="LID Site Design Example"/>	Description:	<input type="text" value="Fill in with actual site information"/>
Applicant:	<input type="text"/>	Street:	<input type="text"/>
Status:	<input type="text"/>	City:	<input type="text"/>
Jurisdiction:	<input type="text" value="City of San Diego"/>	Zip:	<input type="text"/>
Hydrological Unit:	<input type="text" value="Pueblo San Diego"/>	State:	<input type="text"/>
Parcel (APN):	<input type="text"/>		

C) Defining Drainage Management Areas



ID	Description	Type	BMP ID	Area (ac)	Pre-Project Cover	Post-Project Cover
109	DMA #1, Roof	Drains to Self-Retaining	BMP 1	0.9	Pervious	Impervious
110	DMA #2, Roof	Drains to LID	BMP 2	0.9	Pervious	Impervious
111	DMA #3, Roof	Drains to LID	BMP 3	0.6	Pervious	Impervious
112	DMA #4, Roof	Drains to LID	BMP 2	0.6	Pervious	Impervious
113	DMA #5, Parking	Drains to LID	BMP 3	1.00	Pervious	Impervious
114	DMA #6, Parking	Drains to LID	BMP 4	0.8	Pervious	Impervious
115	DMA #7, Parking	Drains to LID	BMP 2	1.2	Pervious	Impervious
116	DMA #8, Natural	Self-Retaining	BMP 1	2.1	Pervious	Pervious



**G) Pond Sizing – Define DMA's**

<span>DMA's</span> <span>Scenario</span> <span>Sizing</span> <span>H-Q Curve</span> <span>Drawdown</span> <span>Report</span>						
Filter:		Page	<input type="text"/>	<input type="button" value="Go"/>	Previous	Page 1/1
ID	Description	Type	Area (ac)	Pre-Project Cover	Post-Project Cover	
103	Apartment Roof Runoff	Drains to LID	3.5	Pervious	Impervious	
104	Landscaping near Apts	Drains to LID	2.00	Pervious	Pervious	
105	Parking Lot	Drains to Pond	4.00	Pervious	Impervious	
106	Perimeter Landscaping	Drains to Pond	0.5	Pervious	Urban	

**H) Pond Sizing – Define Scenarios**

<span>DMA's</span> <span>Scenario</span> <span>Sizing</span> <span>H-Q Curve</span> <span>Drawdown</span> <span>Report</span>				
Filter:		Page	<input type="text"/>	<input type="button" value="Go"/>
Scenario	Description			
Design A	Pond Sizing from Parking Lot Area and Perimeter Landscaping			

# I) Pond Sizing – Calculations

DMA#	Scenario	Sizing	H-Q Curve	Drawdown	Report		
Scenario:	Design A	Pond Sizing from Parking Lot Area and Perime	Status:	Planning			
Site Name:	Workshop Demo #3	Low Flow Threshold (xQ2):	0.3				
Rain Basin:	Lindbergh Field	Low Flow Threshold (cfs):	0.10				
Facility Soil:	Type C (slow infiltration)	2-Year Flow (cfs):	0.33				
Drainage Area (ac):	4.50	10-Year Flow (cfs):	1.04				
<b>Pond Sizing</b> Example Layout		<b>Pond Analysis Results</b>					
Top Area (sqft):	16001	Lower Orifice Size (in):	1	Sizing Complete. Post-project conditions. (Iterations: 11)			
Bottom Area (sqft):	15500	Lower Orifice Invert (ft):	0.00				
Volume (cft):	78754.9	Upper Orifice Size (in):	5				
Depth (ft):	5.00	Upper Orifice Invert (ft):	2.50				
Side Slope 1 (H:1):	5.00	Weir Length (ft):	10.00				
Side Slope 2 (H:1):	5.00	Weir Invert (ft):	4.50				
Calculate Orifice Size:	Calculate	Custom H-Q Curve:	<input type="checkbox"/>				
Calculate Pond Size:	Calculate						
Edit	Save						