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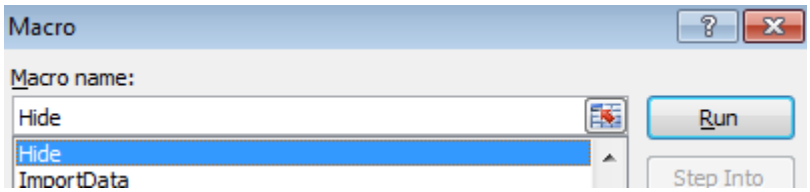
Draft Instructions for updating the base data (PAD & Cost) in the Data Portal for FISHPass

1. Open the Passage Barrier Data Portal (xlsm file) and at the very top of the page right click and select "Restore" so that the tabs at the top are displayed . Click on the "View" tab, navigate to the "Macros" button, use the drop down arrow and select "View Macros". Run the macro labeld 'unhide' in order to see all hidden sheets. The data that needs updating are on these hidden sheets. You will be prompted for the password: GoldenState.



2. The sheets that need updating are the following:

a) The default costs on the **'Default' sheet (as and if needed)**. The default costs were provided by Liam Zarri, PSMFC contractor. In 2015 he combined the costs provided to him and to Donnie Ratcliff the prior year and gave Jesse, the model builder, the typical cost (median), high cost (95 percentile) and low cost (5 percentile). This percentiles and median follow a beta distribution.

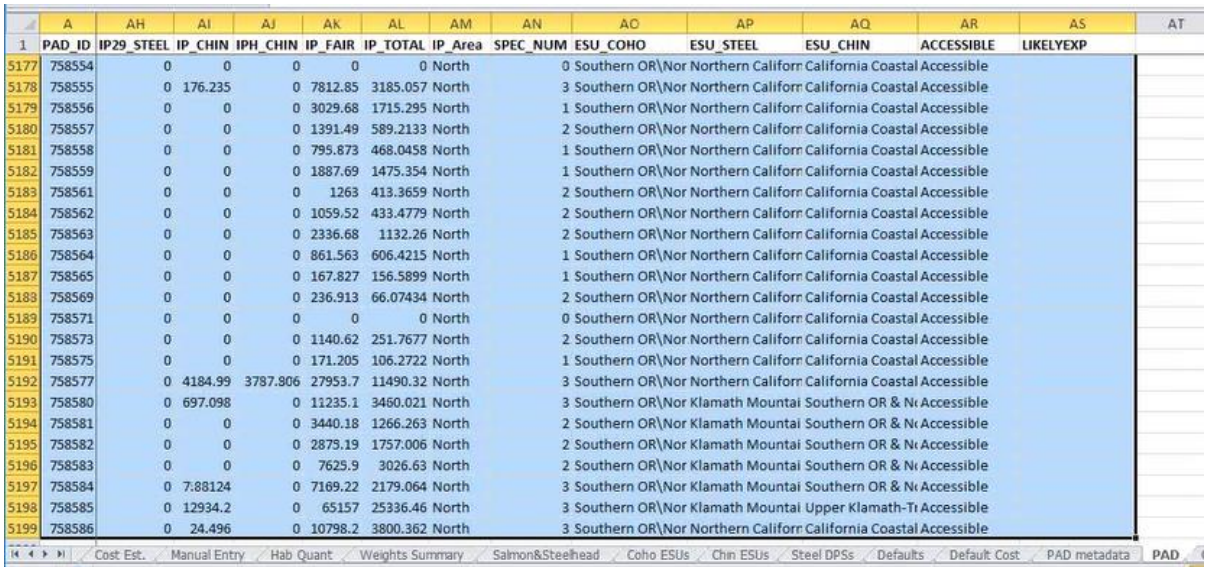
SiteType	Code	5 percentile	Median	95 percentile	Best Guess
Non-structural	0				NA
Unknown	1	9375	57500	337500	95,000
Log jam	2	---	---	---	Barrier Specifi
Dam	3	---	---	---	Barrier Specifi
Road crossing	4	---	---	---	Barrier Specifi
Grade control	5	5000	50000	300000	85,000
Flood control channel	6	500000	1000000	3700000	1,365,000
Flow measurement weir	7	5000	40000	250000	70,000
Tidegate	8	5000	15000	50000	20,000
Fish passage facility	9	---	---	---	Barrier Specifi
Fish trap	10	7500	50000	200000	70,000
Utility crossing	11	30000	80000	350000	115,000
Gravel/borrow pits	12				NA
Diversion	13	30000	80000	1300000	275,000
Other	14	8750	55000	325000	90,000

a.i.

PAD_ID	SiteType	Cost	Comments
700001	Dam	1976000	76' height
700002	Dam	234000	9' height
700016	Dam	650000	25' height
700018	Road cros:	190000	Model results: SACW: 17, Road Type: Surface Street
700020	Dam	130000	small-height unknown-estimate 5'
700021	Dam	130000	small-height unknown-estimate 5'
700022	Dam	416000	16' height
700023	Dam	130000	small-height unknown-estimate 5'
700024	Dam	130000	small-height unknown-estimate 5'
700025	Dam	1170000	45' height

b) **Update 'PAD' sheet**

Delete contents of PAD sheet (all but the top three rows). Place cursor on cell A3, select cntrl & shift + right arrow and then down arrow selecting most of the records in the PAD sheet with the exception of the top two records. Then click 'Delete'.



	A	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT
1	PAD_ID	IP29_STEEL	IP_CHIN	IPH_CHIN	IP_FAIR	IP_TOTAL	IP_Area	SPEC_NUM	ESU_COHO	ESU_STEEL	ESU_CHIN	ACCESSIBLE	LIKELYEXP	
5177	758554	0	0	0	0	0	North	0	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5178	758555	0	176.235	0	7812.85	3185.057	North	3	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5179	758556	0	0	0	3029.68	1715.295	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5180	758557	0	0	0	1391.49	589.2133	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5181	758558	0	0	0	795.873	468.0458	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5182	758559	0	0	0	1887.69	1475.354	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5183	758561	0	0	0	1263	413.3659	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5184	758562	0	0	0	1059.52	433.4779	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5185	758563	0	0	0	2336.68	1132.26	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5186	758564	0	0	0	861.563	606.4215	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5187	758565	0	0	0	167.827	156.5899	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5188	758569	0	0	0	236.913	66.07434	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5189	758571	0	0	0	0	0	North	0	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5190	758573	0	0	0	1140.62	251.7677	North	2	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5191	758575	0	0	0	171.205	106.2722	North	1	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5192	758577	0	4184.99	3787.806	27953.7	11490.32	North	3	Southern OR\Nor	Northern Californ	California Coastal	Accessible		
5193	758580	0	697.098	0	11235.1	3460.021	North	3	Southern OR\Nor	Klamath Mountai	Southern OR & N	Accessible		
5194	758581	0	0	0	3440.18	1266.263	North	2	Southern OR\Nor	Klamath Mountai	Southern OR & N	Accessible		
5195	758582	0	0	0	2873.19	1757.006	North	2	Southern OR\Nor	Klamath Mountai	Southern OR & N	Accessible		
5196	758583	0	0	0	7625.9	3026.63	North	2	Southern OR\Nor	Klamath Mountai	Southern OR & N	Accessible		
5197	758584	0	7:88124	0	7169.22	2179.064	North	3	Southern OR\Nor	Klamath Mountai	Southern OR & N	Accessible		
5198	758585	0	12934.2	0	65157	25336.46	North	3	Southern OR\Nor	Klamath Mountai	Upper Klamath-T	Accessible		
5199	758586	0	24.496	0	10798.2	3800.362	North	3	Southern OR\Nor	Northern Californ	California Coastal	Accessible		

Cost Est. | Manual Entry | Hab Quant | Weights Summary | Salmon&Steelhead | Coho ESUs | Chin ESUs | Steel DPSs | Defaults | Default Cost | PAD metadata | PAD

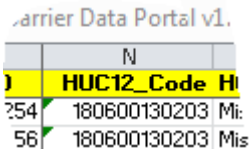
c) **Select columns one by one (or in blocks (e.g., to IP) or all at once) and copy over updated data.** From the updated PAD spreadsheet, click cntrl + shift + down arrow, cntrl c to copy all PAD_ID records and cntrl v to paste it into the PAD sheet in the Data Portal. Change or keep IP to fields as null. Ex: If I want change all IP records to 0, on the first cell in the lower right corner double click to copy all contents in all cells below.

d) Change HUC Code fields from text to number.

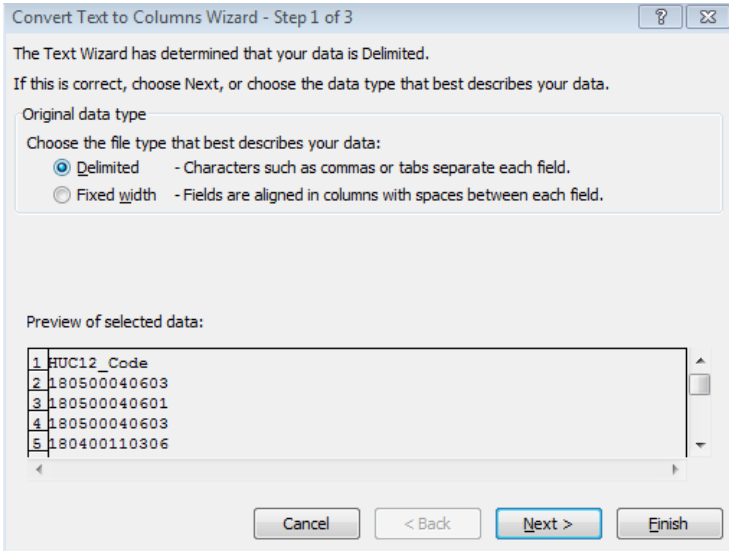
The HUC code fields in the PAD sheet are stored as text instead of numbers which will cause an error in the Region Field of the 'Calculations' sheet (see screen shot below).

	A	BA	BB
1	PAD_ID	REGION	INCL_REGION
12	706252	SC	1
13	706253	SC	1
14	706254	#N/A	#N/A
15	706256	#N/A	#N/A

You will know by the little green triangle in the left corner on the PAD page.



First format them to recognize that they are numbers. Select/highlight the column and then go to Data tab > 'text to columns'> finish which will convert them to numbers.



e) **Update 'Calculations' sheet**

Make sure the PAD ID fields go from PAD!A2 to PAD!A# where the # is the number of PAD records for FISHPass + 2. If not cntrl + shift + right arrow, then drag down until the number of records in the PAD sheet copying the equations for all records.

That is, select all rows with formulas, PADID, and blank cells and drag down all rows to the same number of PAD records (easiest and fastest method).

Make sure the DS_ID is looking at all rows in the PAD (may need to change the number of rows). It is using VLOOKUP and others that use Vlookup (non defaults) of cells that are apt to change, then these fields will need to be recalculated using the number of records (i.e. costs on Calculations sheet pulling from the defaults page).

f) **Update 'Export' sheet.**

May need to un-protect the sheet first by Review tab > unprotect the sheet. Pull down all records from the top data row (second row). Check that all structural barriers types include a cost and that they are not set to $0. You may need to add a few records to the Default List to resolve this issue.

g) **Compare number of records in updated tracing output with the number of records in the 'Export', 'Calculations' and 'PAD' sheets. Check that all formulas have been pulled down to the number of records.** Compare rows 2-3 on each of the three sheets with the other rows and that they contain the same type of info. Check 'Calculations' page and look for cells with #N/A and the Export sheet looking for 0s or numbers in text fields indicating errors.

h) **Update "Default Cost" Sheet (if needed).**

In g) above, if there were records with $0 for structural barriers (i.e., where NJOJ = 1), look up barrier information in the PAD, add the extra PAD IDs to the sheet and assign an appropriate $ value to each. Use the filter tool in excel to check for these records (Cost = $0 and NJOJ = 1).

Look for new dam, road crossing and fish passage facilities, see how many and determine what to use for cost. Will need to check how Liam created these numbers for this sheet and will need to recreate them using his GIS process.

i) Input_File is the user's export from the Data Portal, the Output File is the export/result of Optipass both of which are used in post-processing. The 'Cpass_Calcs' are being used to calculate the cumulative passability. This sheet is being used in the post-processing, in which when the user changes the display to upstream habitat, the Data Portal is calculating the u/s habitat using the u/s habit multiplied by the cumulative passability.