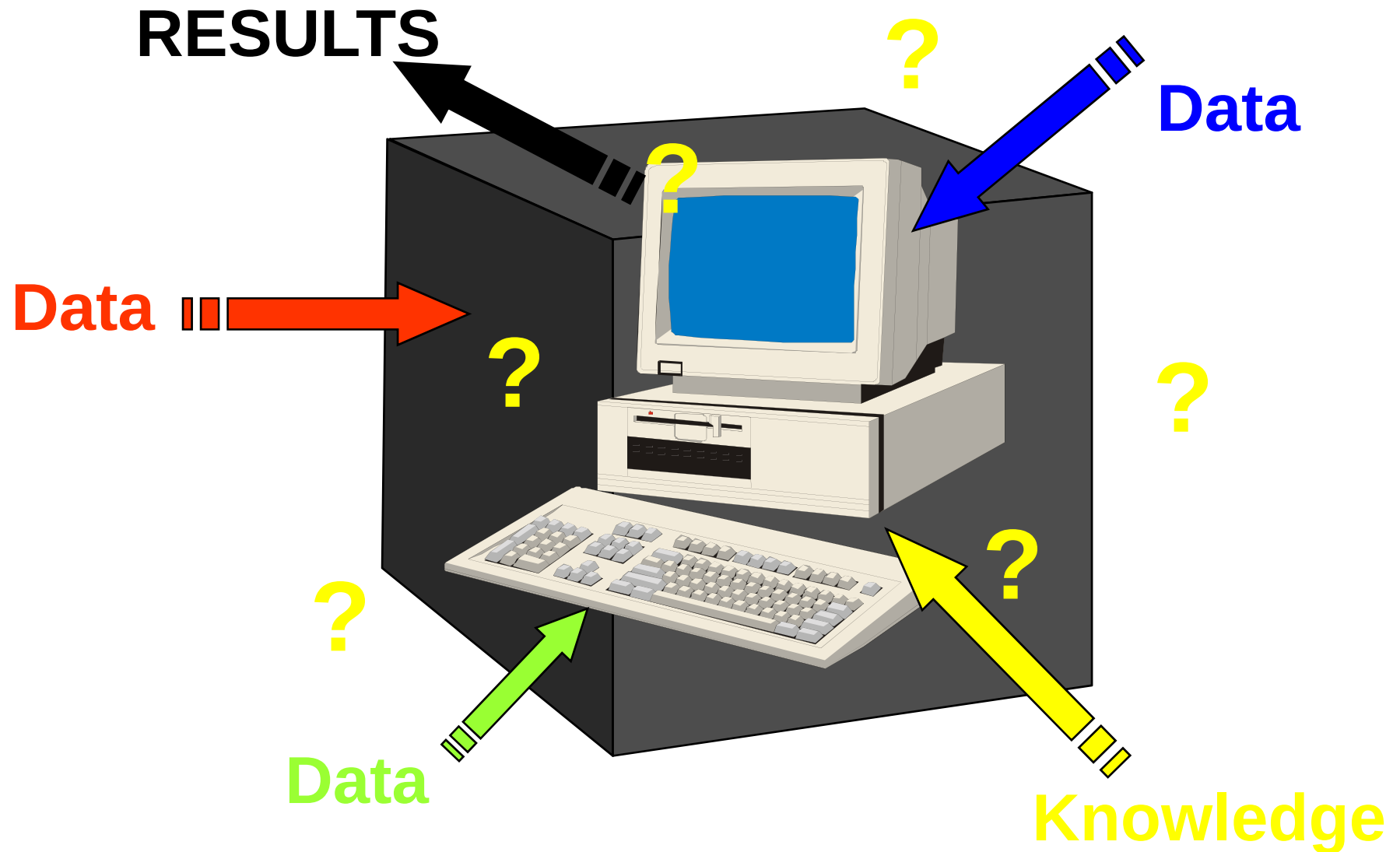


Using Measured Flow Data for Model Validation

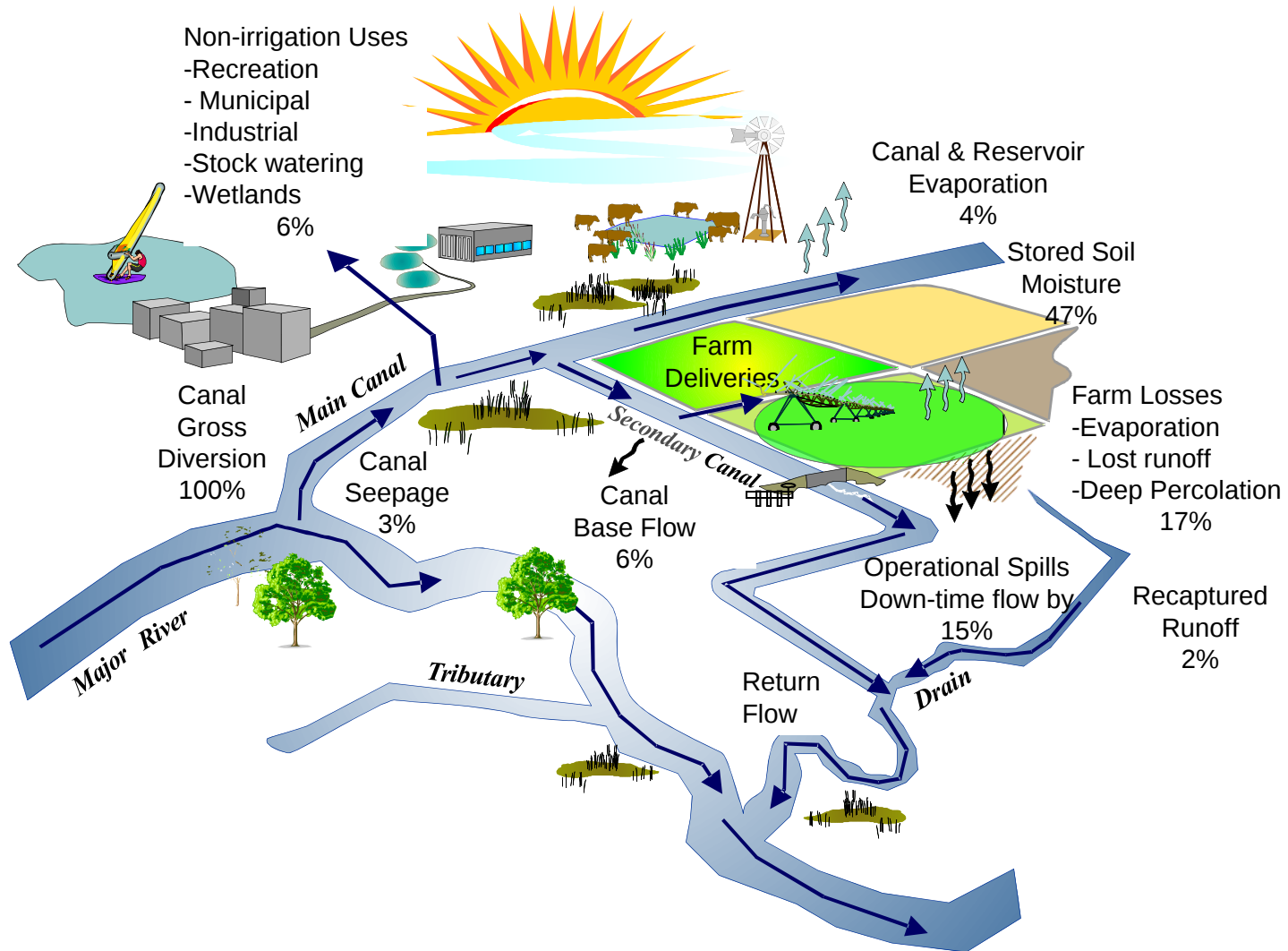
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Basin Water Management Branch
Alberta Agriculture and Rural Development

Computer Modeling – The “BLACK BOX”



Irrigation Demand Model

1. Network Management Module (Irrigation District)
2. Irrigation Requirements Module (On-Farm)



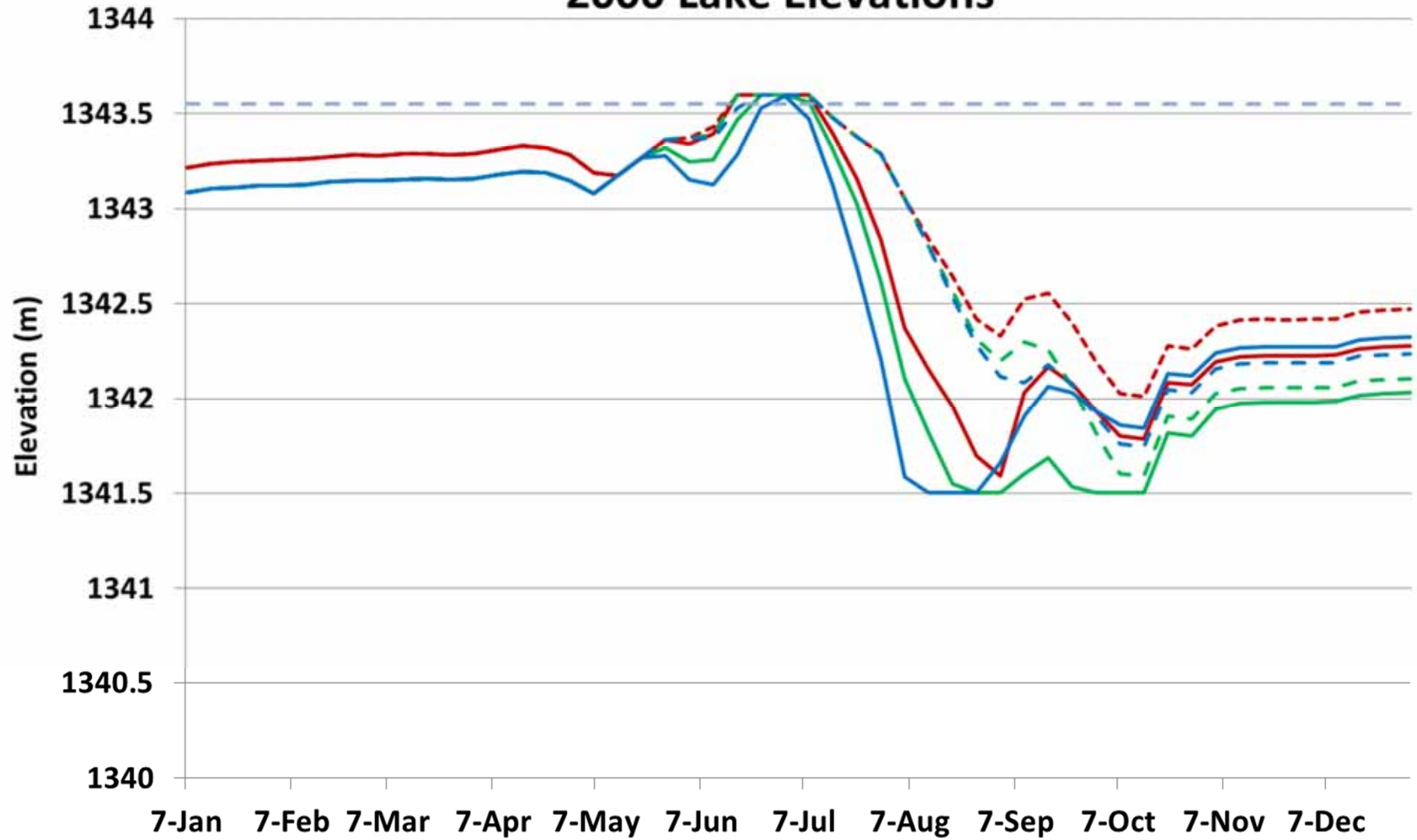
Data Requirements

1. Reservoir Elevations

2. Main Canal

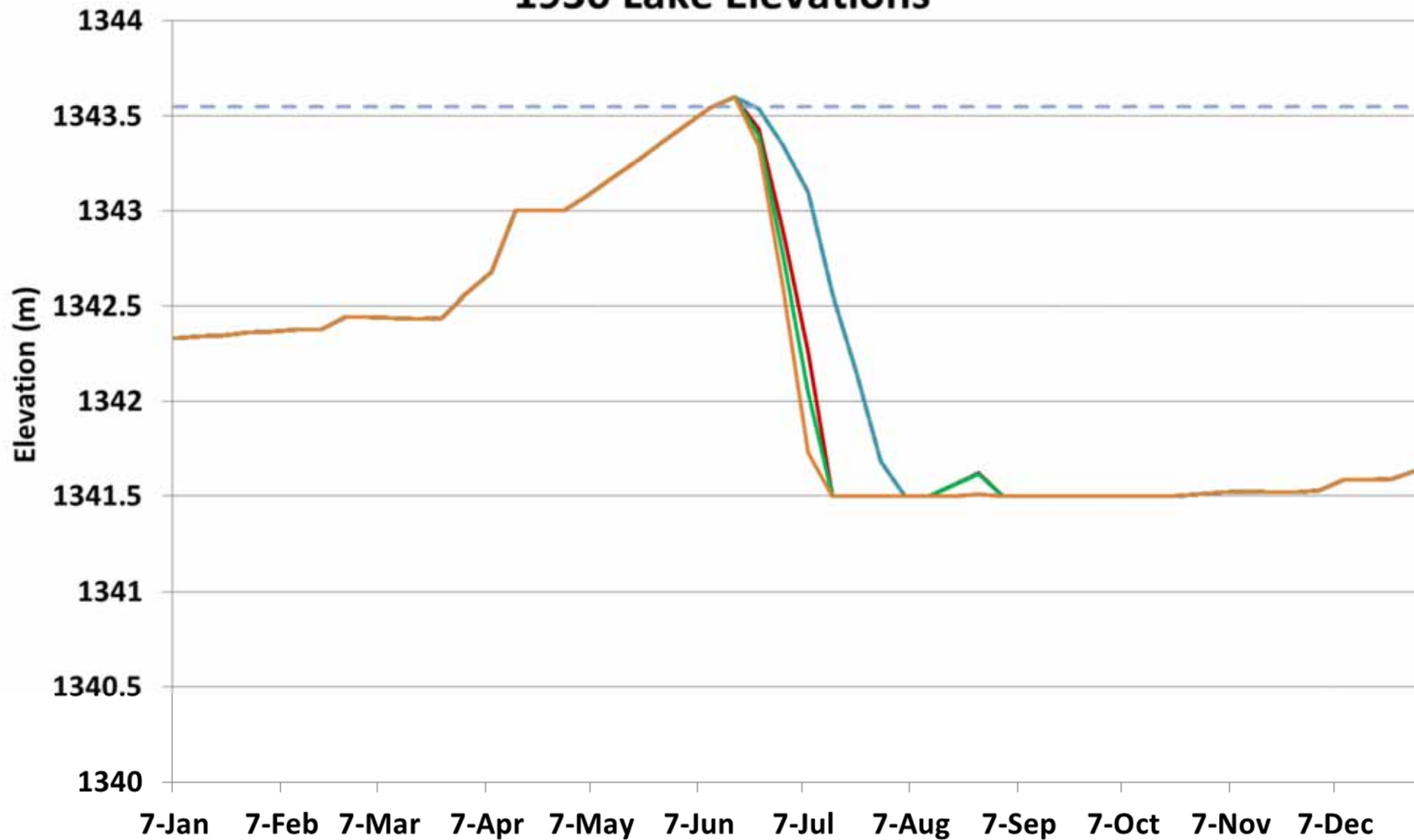
3. Return Flow

Reservoir 207 2000 Lake Elevations



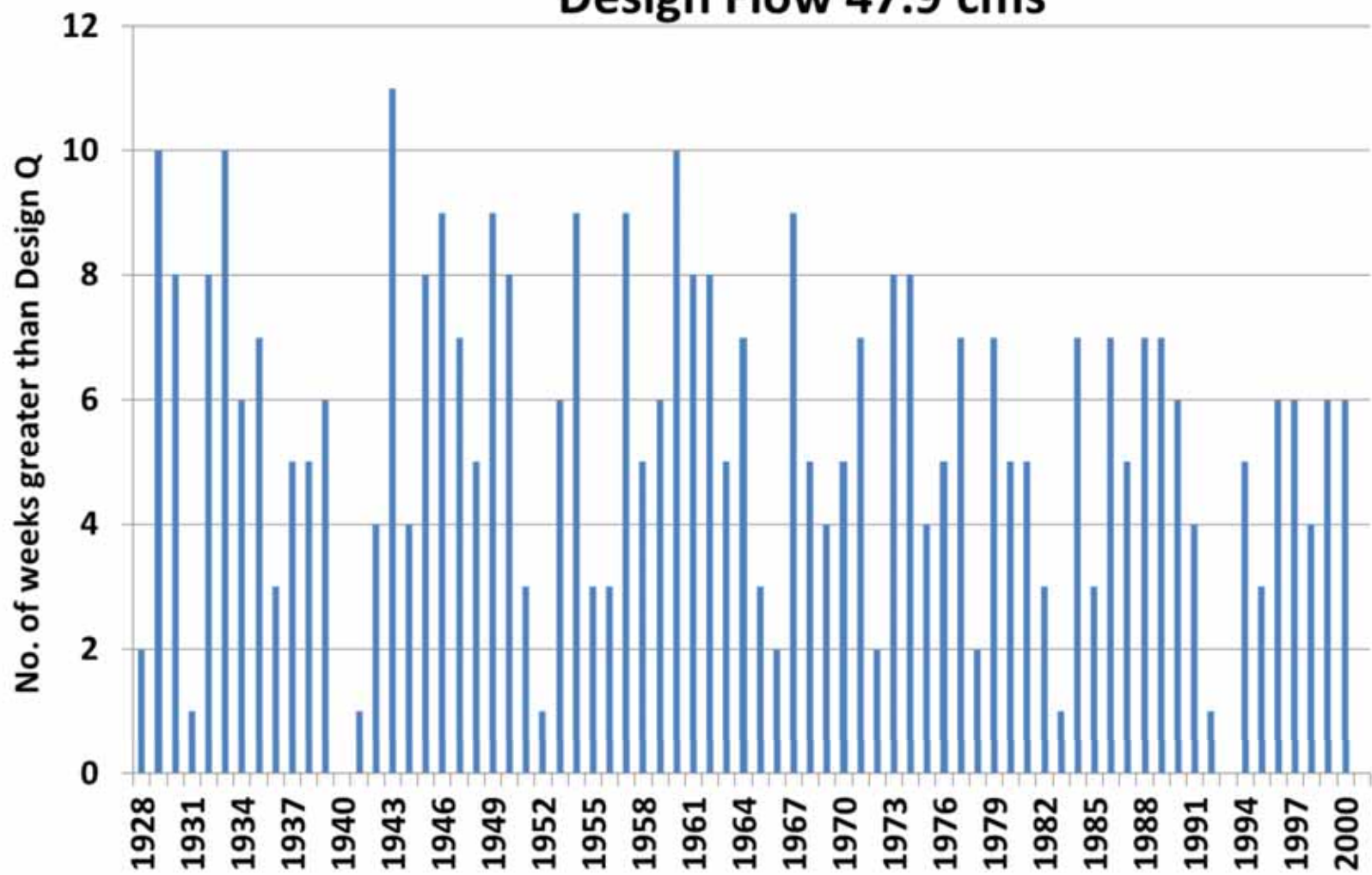
Reservoir 207

1936 Lake Elevations



Div Channel 486

Design Flow 47.9 cms



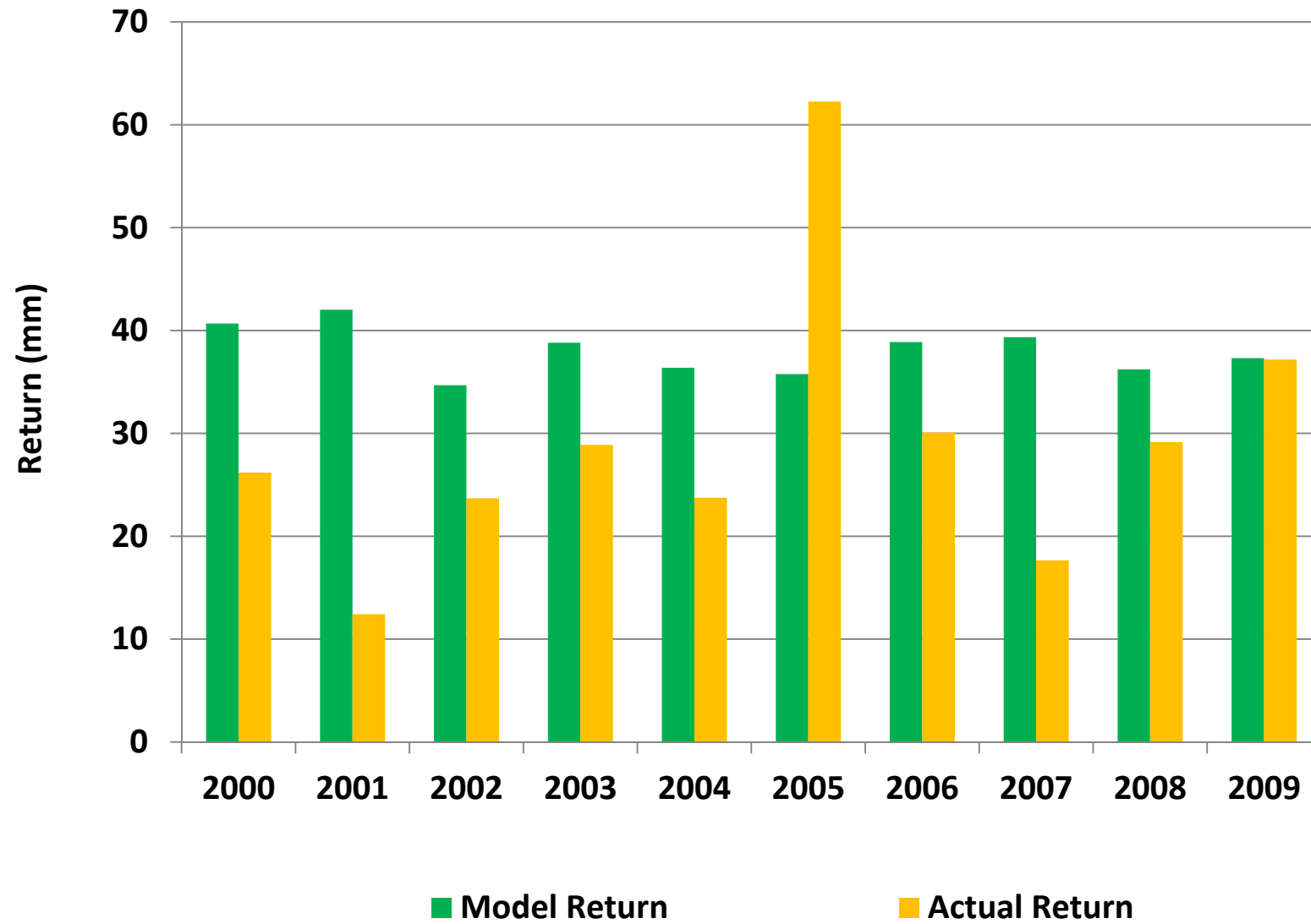
31 weeks of diversion

Number of weeks above the Design Q of 47.9 cms

Flow (cms)	48	50	55	58	61	64	67	70	73	76	79	82
	2	2	0	0	0	0	0	0	0	0	0	0
	10	8	5	5	5	5	3	3	1	0	0	0
	8	7	6	6	5	5	4	3	3	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
	8	7	6	5	4	4	2	1	0	0	0	0
	10	9	5	5	4	3	3	2	1	0	0	0
	6	6	5	5	5	4	4	3	2	0	0	0
	7	6	5	5	4	4	3	3	2	0	0	0
	3	3	2	1	1	1	1	1	1	0	0	0
	5	4	1	0	0	0	0	0	0	0	0	0
	5	5	5	5	4	3	3	2	1	0	0	0
	6	6	6	6	6	4	3	3	3	1	1	1

Note: 31 weeks of flow in the canal.

SMRID



Questions or Comments?

