HYDRAULIC ANALYSIS

SALT CREEK AT LINCOLN, NEBRASKA
SECTION 22 STUDY

STORAGE AREAS

Storage Area	MAX Old High Elevation (ft)	MAX Old Storage Vol (acre-ft)	MAX New Elevation (ft)	MAX New Storage Vol (ft^3)	MAX New Storage Vol (acre-ft)	MAX Change in Vol (acre-ft)
1A	1160	1044	1160.1	78982298	1813	769
2A	1160	1765	1160.0	102233944	2347	582
3A	1160	6840	1160.1	239436676	5497	-1343
4A	1160	530	1160.0	17274543	397	-133
5A	1160	2478	1160.0	79213687	1818	-660
6A	1160	1266	1160.1	85225932	1957	691
7A	1160	478	1160.0	41922361	962	484
8A	1152	435	1152.1	14878652	342	-93
9A	1160	1100	1160.0	103822385	2383	1283
10A	1150	692	1150.0	18075981	415	-277
11A	1150	561	1150.0	20417930	469	-92
1B	1160	586	1160.0	44326429	1018	432
2B	1160	2486	1160.0	134097011	3078	592
3B	1160	3170	1160.1	139708793	3207	37
4B	1160	987	1160.1	72773069	1671	684
5B	1160	1560	1160.1	76469690	1756	196
6B	1160	994	1159.8	30699230	705	-289
7B	1160	340	1160.1	25001247	574	234
8B	1152	763	1151.9	33776336	775	12
9B	1152	3515	1152.0	103352594	2373	-1142
10B	1150	1099	1149.9	64087263	1471	372
11B	1150	2690	1150.1	133538557	3066	376
5C	1160	1133	1160.0	46559383	1069	-64
6C	1160	346	1159.9	3893538	89	-257
7C	1160	531	1160.0	25879646	594	63
5D	1160	7630	1161.5	316568971	7267	-363
8C	1160	142	1160.0	19093798	438	296
9C	1160	385	1159.9	16599003	381	-4
				Sum of Volume Change (acre-ft)		2386

ECONOMIST

ECONOMICS ANALYSIS

1. ESTIMATE ECONOMIC EFFECTS OF ALTERNATIVES

    * FLOOD DAMAGE FOR 100-YEAR EVENT

    * NUMBER OF IMPACTED STRUCTURES

    * ESTIMATED ANNUAL DAMAGES (EAD)

2. COMPARE BASIC ALTERNATIVES

    * 100-YEAR EVENT (EXISTING CONDITION)

    * 100-YEAR +1 FOOT (FUTURE CONDITION)

    * 50% STORAGE UTILIZATION

WHAT HAPPENS OVER TIME

EXISTING CONDITION

STRUCTURE "A" FLOODED

FUTURE CONDITION

* STRUCTURE "A" FLOODED MORE SEVERELY

* STRUCTURE "B"ALSO FLOODED

ECONOMIST

FLOOD DAMAGE MODEL

* INPUTS

  - LAND USE — STRUCTURE TYPE
    GROUND ELEVATION
    FIRST FLOOR ELEVATION

  - FLOOD STAGES BY EVENT
  - DEPTH DAMAGE CURVES

* OUTPUTS

  - STRUCTURE & CONTENT DAMAGES BY EVENT

  - NUMBER OF STRUCTURES BY TYPE

  - ESTIMATED ANNUAL DAMAGE

  - DEPTH OF FLOODING