Appendix F

Option Development Process
ARSP Modeling and Analysis
of Lake Levels and River Flows

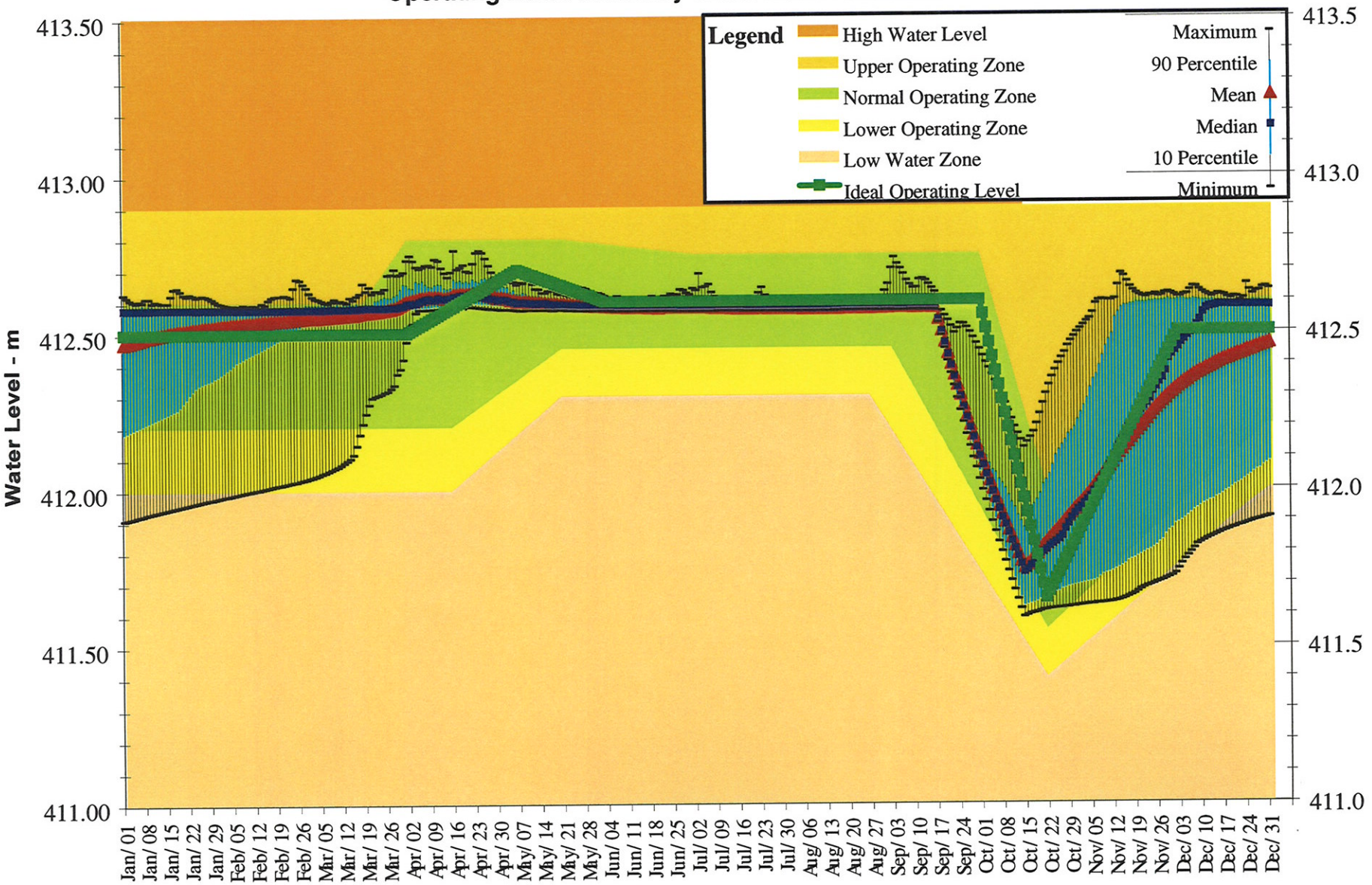
- **ARSP Base Case**
- **ARSP Case One**
- **ARSP Case Two**

Camp Lake

Camp Lake Water Levels

ARSP Simulation Base Case

Operating Rules and Daily Water Level Statistics



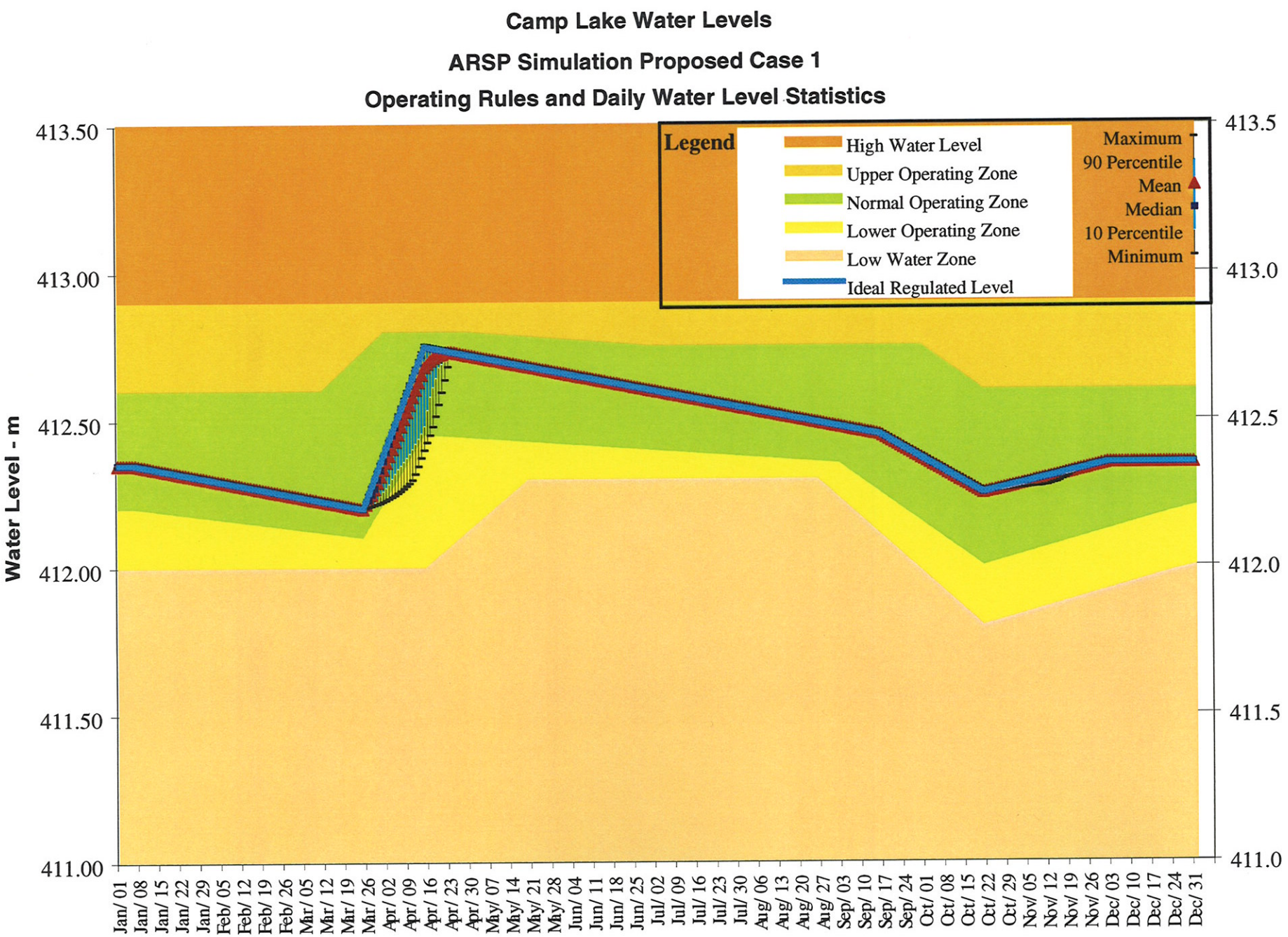
Camp Lake Water Levels
ARSP Simulation Base Case

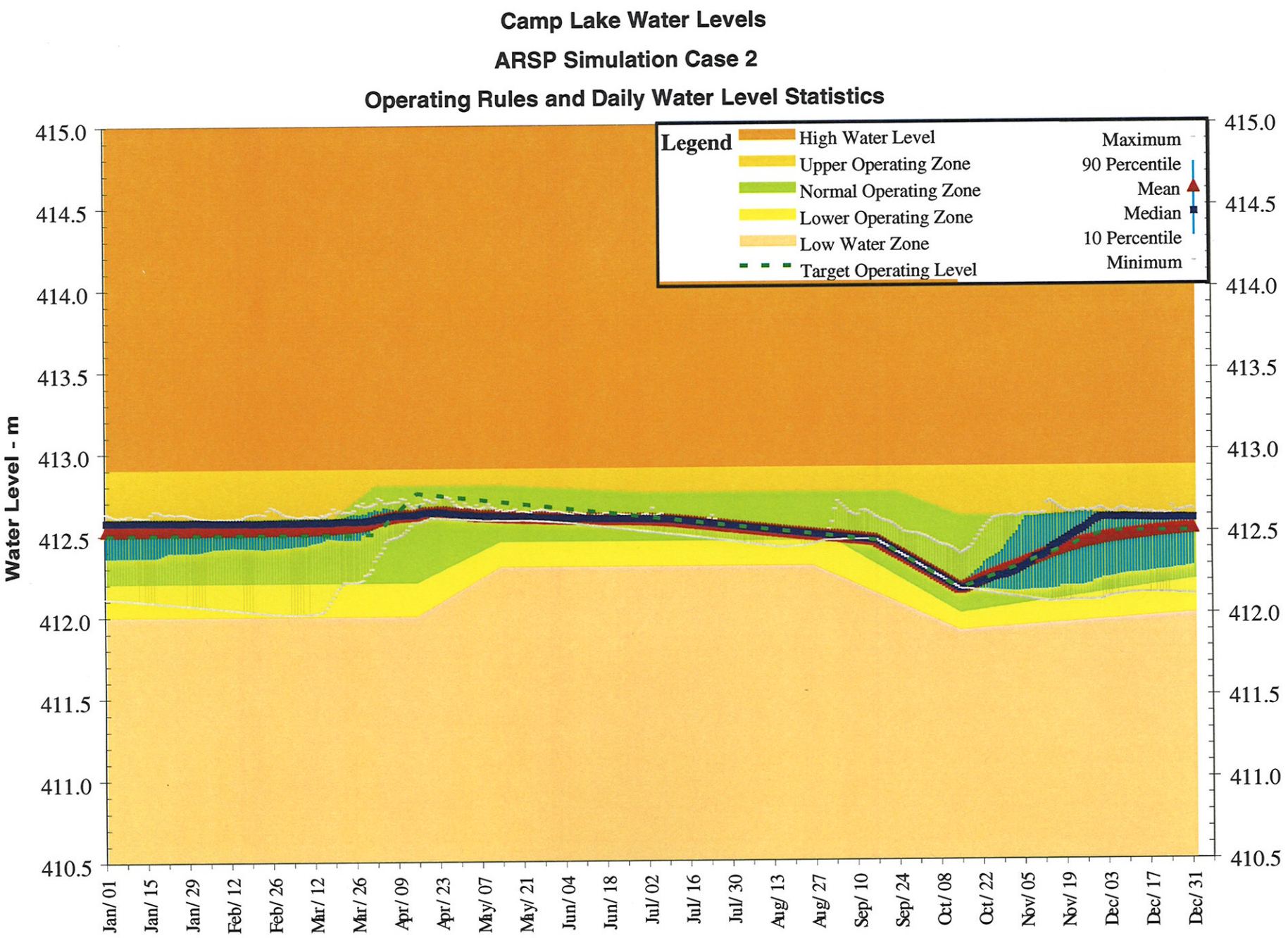
Peak Water Levels	
HWZ	412.9
No of Days in Exceedance	0
No of Years Exceeded	0
Maximum WL	412.77

Time of spring peak levels before April 30	
Percentile	0.90
Peak percentile WL	412.68
Date of peak	26-Apr
Tolerance	0
Tolerated WL	412.68
Date tolerated exceeded	26-Apr

Summer recreation levels Jun-15 to Sep-30	
90 and 10 percentile range	
Max 90%	412.59
Min 10%	412.05
Range	0.54

Median range	
Max Median	412.58
Min Median	412.10
Range	0.48


Camp Lake Water Levels
ARSP Simulation Proposed Case 1
Operating Rules and Daily Water Level Statistics
Legend
High Water Level
Upper Operating Zone
Normal Operating Zone
Lower Operating Zone
Low Water Zone
Ideal Regulated Level
Maximum
90 Percentile
Mean
Median
10 Percentile
Minimum
Water Level - m
413.50
413.00
412.50
412.00
411.50
411.00
413.5
413.0
412.5
412.0
411.5
411.0
Jan/ 01
Jan/ 08
Jan/ 15
Jan/ 22
Jan/ 29
Feb/ 05
Feb/ 12
Feb/ 19
Feb/ 26
Mar/ 05
Mar/ 12
Mar/ 19
Mar/ 26
Apr/ 02
Apr/ 09
Apr/ 16
Apr/ 23
Apr/ 30
May/ 07
May/ 14
May/ 21
May/ 28
Jun/ 04
Jun/ 11
Jun/ 18
Jun/ 25
Jul/ 02
Jul/ 09
Jul/ 16
Jul/ 23
Jul/ 30
Aug/ 06
Aug/ 13
Aug/ 20
Aug/ 27
Sep/ 03
Sep/ 10
Sep/ 17
Sep/ 24
Oct/ 01
Oct/ 08
Oct/ 15
Oct/ 22
Oct/ 29
Nov/ 05
Nov/ 12
Nov/ 19
Nov/ 26
Dec/ 03
Dec/ 10
Dec/ 17
Dec/ 24
Dec/ 31


Camp Lake Water Levels
ARSP Simulation Case 2
Operating Rules and Daily Water Level Statistics
Water Level - m
415.0
414.5
414.0
413.5
413.0
412.5
412.0
411.5
411.0
410.5
Jan/ 01
Jan/ 15
Jan/ 29
Feb/ 12
Feb/ 26
Mar/ 12
Mar/ 26
Apr/ 09
Apr/ 23
May/ 07
May/ 21
Jun/ 04
Jun/ 18
Jul/ 02
Jul/ 16
Jul/ 30
Aug/ 13
Aug/ 27
Sep/ 10
Sep/ 24
Oct/ 08
Oct/ 22
Nov/ 05
Nov/ 19
Dec/ 03
Dec/ 17
Dec/ 31
Legend
High Water Level
Upper Operating Zone
Normal Operating Zone
Lower Operating Zone
Low Water Zone
Target Operating Level
Maximum
90 Percentile
Mean
Median
10 Percentile
Minimum

Camp Lake Water Levels
ARSP Simulation Case 2

Peak Water Levels	
HWZ	412.6
No of Days in Exceedance	3244
No of Years Exceeded	50
Maximum WL	412.75

Time of spring peak levels before April 30	
Percentile	0.90
Peak percentile WL	412.68
Date of peak	16-Apr
Tolerance	0
Tolerated WL	412.68
Date tolerated exceeded	16-Apr

Summer recreation levels Jun-15 to Sep-30

90 and 10 percentile range

Max 90%	412.61
Min 10%	412.30
Range	0.31

Median range

Max Median	412.59
Min Median	412.30
Range	0.29

Spring Peak Water Level

Maximum - 50 yr Average	412.68
Date - 50 yr Average	17/Apr
Summer Average Level	412.50