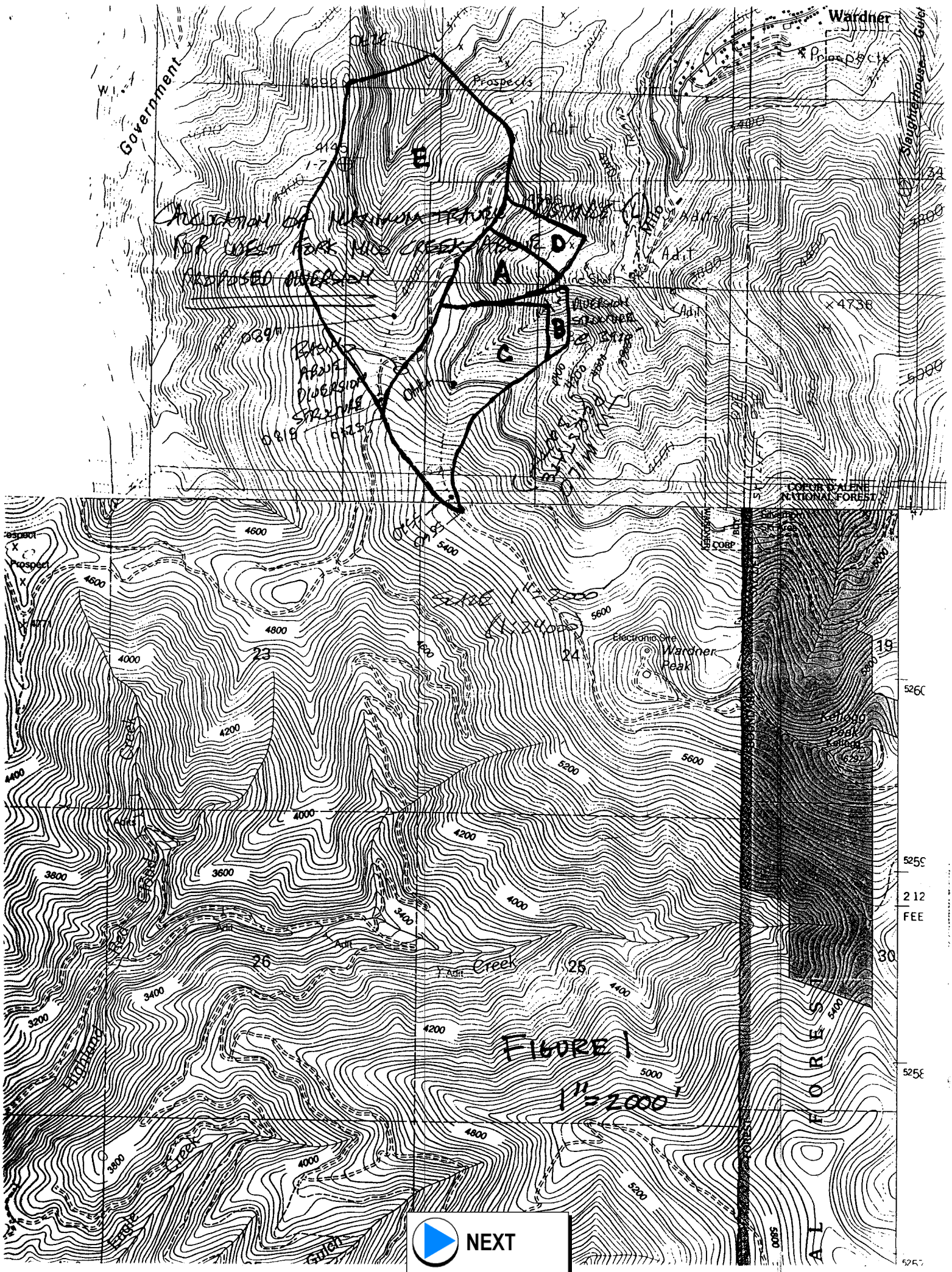
Wardner
Government
Prospects
Slaughterhouse Gulch
Adit
Shaft
A
B
C
D
E
DIVERSION STRUCTURE
COEUR D'ALENE NATIONAL FOREST
Electronic Site
Wardner Peak
Kellogg Peak
Creek
Highland
Empire
Gulch
23
24
25
26
19
30
FIGURE 1
1" = 2000'

NEXT

Table 1. No Snow Precipitation-Frequency Relationship for sub-basins A-D at elevation 4200-ft

| Return Period | Duration | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YR | 5-min | 15-min | 1-hr | 2-hr | 3-hr | 6-hr | 12-hr | 24-hr |
| 2 | 0.12 | 0.24 | 0.42 | 0.56 | 0.69 | 1.00 | 1.50 | 2.00 |
| 5 | 0.17 | 0.33 | 0.57 | 0.73 | 0.87 | 1.20 | 1.80 | 2.40 |
| 10 | 0.20 | 0.39 | 0.69 | 0.87 | 1.02 | 1.40 | 2.10 | 2.80 |
| 25 | 0.25 | 0.48 | 0.85 | 1.04 | 1.20 | 1.60 | 2.40 | 3.20 |
| 100 | 0.31 | 0.62 | 1.09 | 1.31 | 1.51 | 2.00 | 2.90 | 3.80 |

source: Milo Gulch Flood Hydrology and Water Quality Improvement Plan, Spectrum Engineering, March 1996

Table 2. Snowmelt Precipitation-Frequency Relationship for sub-basins A-D at elevation 4200-ft

| Return Period | Duration | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YR | 5-min | 15-min | 1-hr | 2-hr | 3-hr | 6-hr | 12-hr | 24-hr |
| 2 | 0.13 | 0.26 | 0.50 | 0.74 | 0.95 | 1.52 | 2.44 | 3.69 |
| 5 | 0.17 | 0.35 | 0.66 | 0.90 | 1.13 | 1.72 | 2.74 | 4.09 |
| 10 | 0.21 | 0.42 | 0.78 | 1.04 | 1.28 | 1.92 | 3.04 | 4.49 |
| 25 | 0.25 | 0.51 | 0.93 | 1.21 | 1.46 | 2.12 | 3.34 | 4.89 |
| 100 | 0.32 | 0.64 | 1.17 | 1.49 | 1.77 | 2.52 | 3.84 | 5.49 |

source: Milo Gulch Flood Hydrology and Water Quality Improvement Plan, Spectrum Engineering, March 1996

Table 3. No Snow Precipitation-Frequency Relationship for sub-basin E at elevation 4200-ft

| Return Period | Duration | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YR | 5-min | 15-min | 1-hr | 2-hr | 3-hr | 6-hr | 12-hr | 24-hr |
| 2 | 0.12 | 0.24 | 0.42 | 0.56 | 0.69 | 1.00 | 1.50 | 2.00 |
| 5 | 0.17 | 0.33 | 0.57 | 0.73 | 0.87 | 1.20 | 1.80 | 2.40 |
| 10 | 0.20 | 0.39 | 0.69 | 0.87 | 1.02 | 1.40 | 2.10 | 2.80 |
| 25 | 0.25 | 0.48 | 0.85 | 1.04 | 1.20 | 1.60 | 2.40 | 3.20 |
| 100 | 0.31 | 0.62 | 1.09 | 1.31 | 1.51 | 2.00 | 2.90 | 3.80 |

source: Milo Gulch Flood Hydrology and Water Quality Improvement Plan, Spectrum Engineering, March 1996



NEXT

Table 4. Snowmelt Precipitation-Frequency Relationship for sub-basins E at elevation 4200-ft

| Return Period | Duration | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| YR | 5-min | 15-min | 1-hr | 2-hr | 3-hr | 6-hr | 12-hr | 24-hr |
| 2 | 0.13 | 0.26 | 0.50 | 0.74 | 0.95 | 1.52 | 2.44 | 3.70 |
| 5 | 0.17 | 0.35 | 0.66 | 0.90 | 1.13 | 1.72 | 2.74 | 4.10 |
| 10 | 0.21 | 0.42 | 0.78 | 1.04 | 1.28 | 1.92 | 3.04 | 4.50 |
| 25 | 0.25 | 0.51 | 0.93 | 1.21 | 1.46 | 2.12 | 3.34 | 4.90 |
| 100 | 0.32 | 0.64 | 1.17 | 1.49 | 1.77 | 2.52 | 3.84 | 5.50 |

source: Milo Gulch Flood Hydrology and Water Quality Improvement Plan, Spectrum Engineering, March 1996



NEXT

Table 5. Hydrologic Input and Output Data

**NO SNOW MELT**

| BASIN | NAME | AREA | CN | Tc | PEAK DISCHARGE RATE, 24 HR STORM EVENT (cfs) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | (mi2) | | (hr) | 2 YR | 5 YR | 10 YR | 25 YR | 100 YR |
| A | Raise #1 | 0.047 | 58 | 0.307 | 0 | 0 | 1 | 2 | 6 |
| B | Raise #2 | 0.0166 | 55.9 | 0.175 | 0 | 0 | 0 | 1 | 2 |
| C | West Milo Diversion | 0.22 | 55.9 | 0.324 | 0 | 1 | 3 | 5 | 19 |
| D | Surface Diversion | 0.0347 | 66 | 0.245 | 0 | 1 | 3 | 6 | 11 |
| | | | | | | | | | |
| A-D | BASINS A-D | 0.3183 | | | 0 | 2 | 7 | 14 | 38 |
| | | | | | | | | | |
| E | Inez Shaft | 0.484 | 55.3 | 0.359 | 1 | 3 | 5 | 9 | 35 |
| | | | | | | | | | |
| A+D | Raise #1+ Surface Diversion | 0.0817 | | | 0 | 1 | 4 | 8 | 17 |

**WITH SNOW MELT**

| BASIN | NAME | AREA | CN | Tc | PEAK DISCHARGE RATE, 24 HR STORM EVENT (cfs) | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | (mi2) | | (hr) | 2 YR | 5 YR | 10 YR | 25 YR | 100 YR |
| A | Raise #1 | 0.047 | 58 | 0.307 | 2 | 4 | 6 | 9 | 15 |
| B | Raise #2 | 0.0166 | 55.9 | 0.175 | 1 | 1 | 2 | 4 | 6 |
| C | West Milo Diversion | 0.22 | 55.9 | 0.324 | 7 | 14 | 23 | 36 | 57 |
| D | Surface Diversion | 0.0347 | 66 | 0.245 | 5 | 7 | 10 | 13 | 19 |
| | | | | | | | | | |
| A-D | BASINS A-D | 0.3183 | | | 15 | 26 | 41 | 62 | 97 |
| | | | | | | | | | |
| E | Inez Shaft | 0.483 | 55.3 | 0.359 | 12 | 27 | 44 | 70 | 114 |
| | | | | | | | | | |
| A+D | Raise #1+ Surface Diversion | 0.0817 | | | 7 | 11 | 16 | 22 | 34 |

NEXT