and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2756+50-2758+00, P. 94, 95: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures

Sta. 2771+64, P. 93: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a wetland. No measures were taken to properly construct an acceptable stabilized crossing. Disturbed soils had not been mulched. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2778+00, P. 92: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a wetland that flows into a stream. No sediment barriers were in place to prevent soil material from directly washing into either the wetland or the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2788+52, P. 90: No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2801+00, P. 87, 88: No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2814+30, P. 85, 86: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2822+20, P. 84, 85: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream; much siltation and sedimentation was observed. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2832+80-2831+30, P. 82, 83, 84: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream; sedimentation was observed down stream of the crossing. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2839+00, P. 81, 82: No sediment barriers were in place to prevent soil material from directly washing into stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2849+07-2846+10, P. 80, 81: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2870+25, P. 76: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: remove rocks and fill from stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2892+50, P. 72: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2931+38-2934+77, P. 66: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2934+77, P. 65, 66: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Liberty

Sta. 2558+50-2564+75, P. 128, 129: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a bog. Disturbed soils measured approximately 50 feet wide by 300 feet long. This disturbed bog wetland sheet flows into a large open water wetland. No sediment barriers were in place to prevent soil material from directly washing into these wetland systems. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2594+60, P. 122: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter a water course which flows into a stream. No measures were taken to properly construct a ford or other acceptable stabilized crossing. No sediment barriers were in place to prevent soil material from directly washing into the water course. Restoration: stabilize and/or redefine the water course, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2619+23, P. 118, 119: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2624+00, P. 117, 118: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2635+00, P. 115, 116: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2655+15, P. 112, 113: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter and block the stream channel. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2656+30-2654+30, P. 112, 113: Tracked or wheeled vehicles destabilized slopes/banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers in

place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures

Sta. 2662+26-2666+23, P. 111, 112: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures

Sta. 2670+00, P. 110, 111: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2692+21, P. 105, 106: No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2702-2703, P. 104, 105: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta 2732+35-2733+56, P 99,100: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter a stream and wetland. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Appleton

Sta. 2435+00, P. 149: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a wetland with open water beaver flowage. No measures were taken to properly construct an acceptable stabilized crossing. No sediment barriers were in place to prevent soil

material from directly washing into the water. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2448+00-2449+00, P. 147: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a wetland which flows into a freshwater wetland of special significance. No sediment barriers were in place to prevent soil material from directly washing into the wetland. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2512+00, P. 137: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2530+00-2573+78, P. 126, 127, 128, 129, 130, 131, 132, 133, 134: Six unimproved wetland crossings: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter the wetlands. No sediment barriers were in place to prevent soil material from directly washing into these wetlands. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Searsmont

Sta. 2150+33-2134+00, P. 196, 197, 198, 199: Large wetland alteration: tracked or wheeled vehicles destabilized in excess of 4 acres of wetland soils and wetland vegetation. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2161+60, P. 194, 195: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2171+75, P. 192, 193: No sediment barriers were in place to prevent soil material from directly washing into the stream. No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2182+65, P. 190, 191: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent

soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2239+79-2236+70, P. 181, 182: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2293+89-2296+73, P. 172: Tracked or wheeled vehicles destabilized slopes, wetland soils and vegetation during an unimproved wetland crossing. No sediment barriers were in place to prevent soil material from directly washing into the wetland. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2319+20, P. 169, 170: Unimproved wetland and stream crossing: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the wetland and the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream or wetland crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2351+88-2349+31, P. 163, 164: Unimproved wetland and stream crossing: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the wetland and the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream or wetland crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream or wetland. Restoration: redefine/stabilize stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2368+17-2369+54, P. 161: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2421+81-2425+96, P. 151, 152: Unimproved wetland crossing. No sediment barriers were in place to prevent soil material from directly washing into the wetland. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Morrill

East Side of Rt. 131 Crossing, P. 224, 226: Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1964+00, P. 229: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1970+00, P. 228, 229: No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1983+00, P. 225, 226: No sediment barriers were in place to prevent soil material from directly washing into the stream. No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2007+70-2020+56, P. 219, 220: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter a wetland contiguous with a Great Pond (Smith's Mill Pond). No diversions were constructed to divert surface water through a vegetated buffer and no mulch was installed. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2047+41, P. 214, No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2049+18-2046+31, P. 213, 214: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 2092+62-2103+40, P. 204, 205, 206: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream and associated wetland. No sediment barriers were in place to prevent soil material from directly washing into the stream or wetland. No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Waldo

Sta. 1792+00, P. 258, 259: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter the stream. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1794+20, P. 257, 258: Tracked or wheeled vehicles destabilized slopes causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1825+00, P. 252, 253: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1833+00, P. 251, 252: No sediment barriers were in place to prevent dumped and exposed soil material from directly washing into the stream. No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1934+65, P. 234, 235: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Waldo/Brooks

Sta. 1073+77-1068+97, P. 380: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1095+85-1093+75, P. 376: Silt fence not keyed in and functioning as intended to prevent sediments from entering the resource. Area was mulched. Restoration: maintain erosion and sediment control measures and vegetative stabilization measures.

Sta. 1633+00-1630+00, P. 285: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. A silt fence was placed across the stream channel, however it was in disrepair and not functioning as intended to prevent sediments from washing down stream. No sediment barriers were in place to prevent soil material from directly washing into stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1659+13-1642+50, P. 281, 284: No sediment barriers were in place to prevent soil material from directly washing into stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1670+00-1666+00, P. 280: At the road crossing the silt fence was in the proper location, however it was not installed properly or functioning as intended to prevent sediments from

entering the resource. Restoration: maintain erosion and sediment control measures and vegetative stabilization measures.

Sta. 1683+00, P. 276, 277: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1693+67-1696+25, P. 274, 275: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1696+25, P. 274, 275: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Brooks/Swanville

Sta. 1603+00-1597+81, P. 291: Silt fence was down and not functioning as intended on the northeast side of the stream and disturbed soils had not been mulched. The wetland and stream had been crossed in 7 different locations. Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1620+00-1610+00, P.288: The stream originates in the road and flows down the road for approximately 200 linear feet. No sediment barriers were in place to prevent soil material from directly washing into the stream. One piece of silt fence was installed across the channel where it leaves the ROW. Restoration: remove silt fence from the channel, install erosion and sediment control measures and vegetative stabilization measures.

Swanville

Sta. 1514+66, P. 304, 305: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1514+66, P. 304, 305: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to

divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine the stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1515+12-1513+27, P. 304, 305: No sediment barriers were in place to prevent soil material from directly washing into the stream and wetland. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Monroe

Sta. 1331+09-1330+41, P. 335: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1357+23-1356+43, P. 330, 332: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1357+00, P. 331, 332: No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1384+85-1383+00, P. 326, 327: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1385+60, P. 326, 327: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1387+50-1383+00, P. 326: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1408+, P. 322, 323: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1410+00-1400+50, P. 323: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1418+50, P. 320, 321: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1421+30-1422+50, P. 320, 321: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize sand/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1427+92, P. 319, 320: No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1451+00, P. 314, 315: No diversions were constructed to divert surface water through a vegetated buffer. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

Frankfort

Sta. 1214+40, P. 355, 356: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions constructed to divert

surface water through a vegetated buffer. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1220+04, P. 354, 355, No silt fence was in place to prevent soil material from directly entering the stream. Restoration: install erosion and sediment control measures and vegetative stabilization measures.

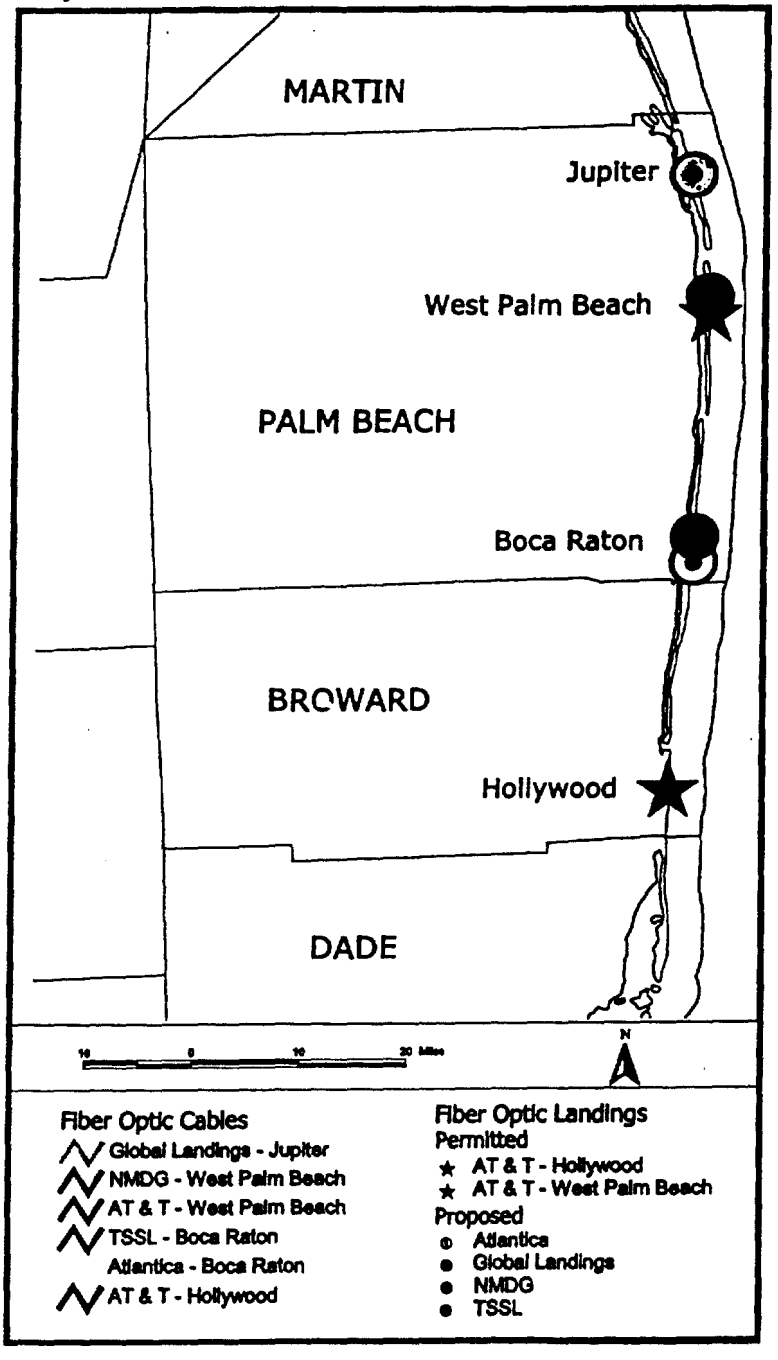
Sta. 1297+, P. 341, 342, Tracked or wheeled vehicles destabilized slopes and banks causing the stream channel to become blocked with rocks and debris and causing soil material to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

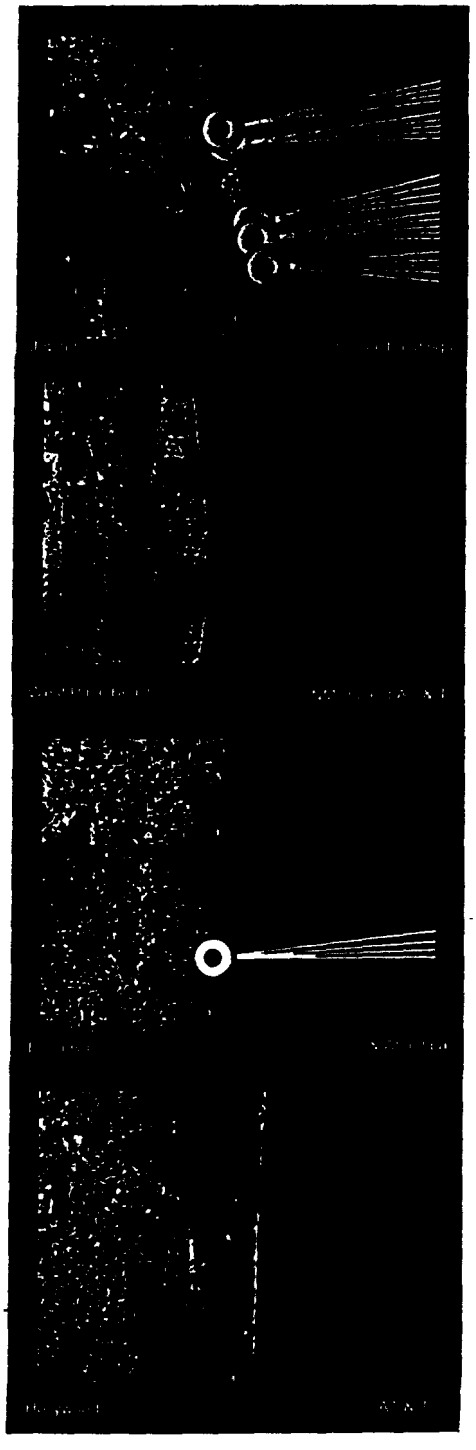
Sta. 1299+00-1294+00, P. 342: Tracked or wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Sta. 1319+98-1320+08, P. 337, 338: Tracked or Wheeled vehicles destabilized slopes and banks causing soil material and debris to enter the stream. No measures were taken to properly construct a stream ford or other acceptable stabilized stream crossing. No diversions were constructed to divert surface water through a vegetated buffer. No sediment barriers were in place to prevent soil material from directly washing into the stream. Restoration: stabilize and/or redefine stream channel, install erosion and sediment control measures and vegetative stabilization measures.

Exhibit 4

Permitted and Proposed Fiber Optic Cables within the DEP Southeast District





DISCLAIMER:
--The New Millennium Development Group has not submitted an application to date. The proposed landing site was given during a preapplication meeting on February 4, 2000. No additional details were submitted. Using the minimum number of cables per landing from recent permits, four cables were used for representation.
--Global Landings Fiber Optic Cables have proposed five possible landing sites. The depiction shown here of the cable configurations were a supposition by DEP staff for the sole purpose of this illustration. No site specific details or drawings have yet been submitted to DEP.
--This map was developed by the Program Review and Information Management Section in the Bureau of Submerged Lands and Environmental Resources at the Department of Environmental Protection. It was created for the Southeast District Office for display purposes only. Any other use is not advised. If you have any questions regarding information depicted here, please contact Jayne Bergstrom at (561) 681-6634.
Map created on March 6, 2000 by Jeanette Sebo-Sturm (850) 488-0130.

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PRINTED ON RECYCLED PAPER

February 29, 2000
Operations Center

Mr. David Struhs, Secretary
Florida Department of Environmental Protection
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

re: Cable Landings in Southeast Florida

Dear Mr. Struhs,

The proliferation of permit applications for submarine telecommunication cable landings in recent months (1 permitted, 3 pending, plus at least 2 not yet submitted) indicate the urgent need for a comprehensive program to address these activities. ReefKeeper International respectfully requests that the Florida Department of Environmental Protection (FDEP) develop a policy to address these cable landings on a regional basis rather than a site-by-site basis. ReefKeeper International supports the use of a regional cable landing facility to minimize the placement of these fiber optic cables and damage to coral reefs and hardbottom communities in Southeast Florida.

For over ten years, ReefKeeper International has worked as a non-profit coral reef conservation organization to protect coral reefs in Florida and throughout the Caribbean. We look forward of your support of our request for a comprehensive program for cable landings.

The Coral Reefs of Southeast Florida

In addition to the better-known coral reefs of the Florida Keys, irreplaceable coral reef habitats line Florida's east coast, from Fort Pierce to Miami. These resources convey economic as well as ecological benefits to the state of Florida.

The Dade, Broward and Palm Beach offshore reefs make up an extension of the reef tract referred to as the "Northern Florida Reef Tract" (Goldberg 1973). This expansive shelf-edge coral reef is approximately 85 km in length, spanning the southeast coast of Florida. Three reef areas can be found in the Northern Florida Reef Tract (Blair and Flynn 1989; Goldberg 1973). The reef areas vary somewhat with location, but in general, form three parallel, low relief terraces. The reef terraces lie between 0.25 and 2.5 miles offshore, with the exception of occasional inter-tidal reefs in Broward and Palm Beach Counties. The classic reef distribution pattern described for southeast Florida reefs north of Key Biscayne consists of an inner reef in approximately 15 to 25 feet (5 to 8 meters) of water, a middle patch reef zone in about 30 to 50 feet (9 to 15 meters) of water, and an outer reef in approximately 60 to 100 feet (18 to 30 meters) of water (Goldberg, 1973).

The Northern Florida Reef Tract shows extensive coverage of benthic organisms including relatively high densities of hard corals and high densities of soft corals, algae and sponges (Blair 1992). Blair and Flynn (1989) described the reefs and hardbottom communities off Dade County and compared them to the offshore reef communities from Broward and Palm Beach counties. They documented a decrease in the hard coral species density moving northward from Dade County to Palm Beach County. Despite this gradual decrease in the density of hard coral species present, the overall hardbottom assemblage of hard corals, soft corals, and sponges seen along southeast Florida's offshore reefs remains remarkably consistent throughout the counties of Dade, Broward, and Palm Beach (U.S. Army Corps of Engineers, 1996).

The hardbottom reef areas off Dade, Broward, and Palm Beach Counties are thriving habitats which mark the northern extent of numerous hard coral species and serve as a transition zone between tropical, subtropical and warm temperate species. The hardbottom reef areas support numerous species of recreationally and economically important fish which provide a substantial economic resource through tourism (i.e. diving, fishing) and an established commercial fishery (Blair, 1992).

Submarine Cables Damage Coral Reefs and Hardbottoms

In general, the approved permit and the permit applications submitted to date outline procedures for laying fiber optic cables on the seabed from deep ocean areas into the nearshore zone. In the nearshore zone and along the beach to a specified manhole, the cables are buried under the sand by placing them in conduits installed using directional drilling.

As was evidenced during the laying of cables in Broward County last year (permit number ES 06-0144298-001), damage to hard corals and other reef organisms does occur as cables are laid across coral reefs and hardbottom communities. Impacts to hard corals were categorized into four major types: dislocated and overturned corals; corals covered and shaded by cable; corals touched by cable; corals abraded by cable. The laying of the Americas 2 cable off Broward County resulted in 73 dislocated hard coral colonies, 78 shaded hard coral colonies, 45 hard coral colonies touched by the cable, and 12 hard coral colonies that were abraded. Damage to hard corals by the Columbus 3 cable was similar (16 dislocated, 56 shaded, 63 touched, 29 abraded). Damage to soft corals and other reef inhabitants was not quantified by the assessment but definitely occurred.

Depending upon the area in which the cables are laid, high relief reef structure may dominate the seafloor. Not only could individual corals be killed, abraded, overturned, or shaded as was seen off Broward County, but the very reef structure itself may be crushed or damaged during the laying of these cables.

Directional drilling is utilized from beach manholes offshore so that the cables are not laid across the beach and trenching is not required to bury the cables. Damage can occur if the directional drilling technique fails, resulting in a breakthrough of the drill and associated fine-grained drilling mud through the ocean floor. The impact to corals immediately surrounding this break would be large.

If the cables require repair, this may necessitate removing the cable from the seafloor onto a boat. Dragging up a section of cable and then replacing it will likely result in damage similar to the initial cable placement. Damage can also occur as boats anchor on or near the cables.

In addition to the physical damage to individual corals posed by cable laying, a loss of aesthetic value of the coral reef occurs. Divers utilizing the area now see cables lying along the reef instead of a natural environment. The abundance of proposed cables, if all are approved, will limit the areas where divers can go without encountering these cables.

Proliferation of Permit Applications

Recently, ReefKeeper International worked with the FDEP on the cable landing project in Broward County to minimize damage to the valuable coral reef resources in that area. That project entailed the installation of conduits for 9 cables, with 2 cable currently landed. The remaining 7 cables will be landed at some future time.

We understand there are currently three pending applications in Southeast Florida - Global Landings (file 50-0163529-001) for 4-25 cables, Tyco Submarine Systems (file 50-0164707-001) for 6 cables, and Atlantica USA (file number 50-0163252-001) for 4 cables. We further understand that at least two other companies have made inquires into permitting cable landings, with at least 2 sites in Palm Beach County and 2 in Miami-Dade County.

Potential Cumulative Impacts Unknown

Damage to corals was documented during the recent installation of cables off Broward County, Florida. Even if the damage caused by one or two cables is somehow considered "insignificant", the cumulative impact of many fiber optic cables installed in the Southeast Florida area may not be "insignificant". In light of the known damage by <u>one</u> cable, the damage by many more cables is likely to be <u>very</u> significant.

As cable laying expands in this area, the locations where divers can visit free from cables is rapidly decreasing. This can only result in a decrease in the use and enjoyment of the resource, with associated economic consequences.

Each permit application appears to be reviewed by itself rather than considering the long-term damage to the resource as a whole of this activity. Currently, there appears to be no limit to how many cables will transverse our valuable coral reefs and hardbottoms.

Conclusions

There can be no doubt that the laying of submarine telecommunication cables adversely impact coral reefs and hardbottom environments. There can also be no doubt that the number of such cables laid across the fragile coral ecosystems of Southeast Florida could easily exceed 20, 30, or even 40 cables over the next few years.

ReefKeeper International supports the use of a central cable landing facility to minimize the placement of these fiber optic cables. The site should be preselected to be the least likely to be associated with or affect hardbottom habitats. Environmental considerations should be one of the primary driving forces in the site selection, not an afterthought.

ReefKeeper International is aware that a site in Jupiter is currently being evaluated for precisely that reason.

Thank you for your consideration, and anticipated support, of our requests. A reply to this request would be greatly appreciated.

Sincerely,

Alexander Stone

Alexander Stone
President
ReefKeeper International

Diane M Rielinger

Diane M. Rielinger
Senior Policy Associate
ReefKeeper International

References:

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Southeast District, SLERP
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re: File Number 50-0164707-001
Proposed TSSL Submarine Cable
Landing Permit Application

Dear Mr. Rach,

ReefKeeper International has reviewed the above referenced permit application and has some serious objections to the proposed plan, as outlined below. Based upon these objections regarding the potential for damage, mitigation plan, and analysis of cumulative impacts, ReefKeeper International requests that this permit application not be approved in its current form.

The proliferation of permit applications for cable landings indicate the urgent need for a comprehensive program to address these activities. ReefKeeper International supports the use of a regional cable landing facility to minimize the placement of these fiber optic cables and damage to coral reefs and hardbottom communities.

For over ten years, ReefKeeper International has worked as a non-profit coral reef conservation organization to protect coral reefs in Florida and throughout the Caribbean. Recently, we have worked with the Florida Department of Environmental Protection (FDEP) on a cable landing project in Broward County, Florida (permit number ES 06-0144298-001) to minimize damage to the valuable coral reef resources in that area. We look forward of your support of our objections to this proposed permit in Boca Raton, Florida.

POTENTIAL DAMAGE TO CORAL

The proposed cable project has the potential to damage significant coral reefs off Boca Raton, Florida. The permit application acknowledges that coral barrier reefs are present approximately 1,250 meters offshore and that the cables will be laid across this system. These coral reefs are high relief areas characterized by the presence of hard corals and other marine life. Attachment A to the permit application outlines the biological resources of the area, which includes 14 species of hard coral, 18 species of octocoral, and 40 species of sponges.

The proposed project would require cables to exit a submarine borehole nearshore, spread out as the water deepens per industry standards, but then narrow in while crossing a 100 meter "gap" in the barrier reef system. Threading the cables through this "gap" would require the cables to be laid only 17 meters apart, which is much less than the industry standard of two time the water depth, in this case 40 - 55 meters apart.

ReefKeeper International questions the ability to lay the cables within such a narrow "gap" in the reef system. Our understanding of the cable-laying process is that greater distances are required between cables to ensure that the cables do not get crossed. While the cable is being laid, the ability to precisely lay the cables is limited due to the movement of the vessel, movement of the cables as they traverse the water columns, and wind and wave action.

As was evidenced during the laying of cables in Broward County, damage to hard corals does occur if the cables are dragged across or land on top of corals. The potential for damage if the cables off Boca Raton are not laid precisely where planned is tremendous. The area outside of the narrow "gap" is high relief reef structure. Not only could individual corals be killed, but the reef structure itself may be damaged.

Attachment A of the permit application, Section 5.1 entitled "Potential Impacts" states "Laying of cable on the second offshore reef system could result in coral-head shearing due to lateral movement of the cable." This is the only potential impact identified. As we saw at the Broward County site, potential impacts include much more, such as coral shading and cables touching coral. In the case of high relief areas such as that bordering the "gap", damage to the actual reef structure is possible in addition to damage to individual corals.

The potential impacts of the proposed cable laying are not fully addressed in the permit application. The applicant is proposing to install the cables along a narrow corridor that is much smaller than industry standard. The potential for extensive coral reef damage is too large to allow this project to proceed as requested. Therefore, ReefKeeper International requests that the permit application be rejected until a more thorough evaluation of potential impacts is made. Additionally, the feasibility of laying the cables along a narrow corridor must be completely determined.

LACK OF MITIGATION PLAN

The permit applicant offers no plan for mitigation in the case damage does occur. A post-installation monitoring program is proposed to determine the extent of damage. But there is no plan outlined to do anything about the identified damage, especially such mitigation as securing overturned hard corals to prevent their death. This lack of proposed mitigation is completely unacceptable. ReefKeeper International requests that a specific plan be required which outlines all actions to mitigate any adverse impacts to the coral reefs.

In addition to the potential damage to individual corals, this proposed project will result in a loss of aesthetic value of the coral reef. Divers utilizing the area will now see cables lying along the reef. ReefKeeper International requests that the applicant also mitigate for the loss of this aesthetic value.

POTENTIAL CUMULATIVE IMPACTS UNKNOWN

Damage to corals was documented during the recent installation of cables off Broward County, Florida. Even if the damage caused by one or two cables is somehow considered "insignificant", the cumulative impact of many fiber optic cables installed in this area may not be "insignificant". In light of the known damage by one cable, the damage by many more cables is likely to be very significant.

The proliferation of permit applications for cable landings indicate the urgent need for a comprehensive program to address these activities. These applications cannot be reviewed in a vacuum but rather require consideration of long-term damage to the resource as a whole. Currently, there appears to be no limit to how many cables will transverse our valuable coral reefs and hardbottoms.

ReefKeeper International supports the use of a central cable landing facility to minimize the placement of these fiber optic cables. The site should be preselected to be the least likely to be associated with or affect hardbottom habitats. Environmental considerations should be one of the primary driving forces in the site selection, not an afterthought. ReefKeeper International is aware that a site in Jupiter is currently being evaluated for precisely that reason.

Thank you for your consideration, and anticipated support, of our requests. A reply to this request would be greatly appreciated.

Sincerely,

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Diane M. Rielinger
Senior Policy Associate
ReefKeeper International

cc: Jayne Bergstrom, FDEP
Linda Ferrell, ACE

DRAFT

(March 23~~1~~, 2000~~ Edits of Phil's 3/4 version)~~ in revision mode
~~[Group:: /PRIM/FOCs]~~

Fiber Optic Cables "White Paper"

Department of Environmental Protection
Division of Water Resource Management
Bureau of Submerged Lands and Environmental Resources

Background

The Department of Environmental Protection (DEP) has recently seen an increasing number of requests for the laying of fiber optic cables across the state. These projects have been both regional and statewide in scope, laid either in uplands with water and wetland crossings as necessary, or laid offshore~~,~~ as oceanic interstate and international cables laid in the state's territorial waters and connecting to onshore "landings." Some installations have occurred without proper ~~or any~~ authorization. DEP Districts observe and report that there is a general lack of understanding of the potential impacts arising from this work. This "White Paper" is intended to provide key background information to the Department and the Board of Trustees (BOT) to make improved management decisions and to formulate Department and BOT procedures for the review and authorization required for these cables.

Overview of FOC Industry and Projected Growth in Florida

Fiber optic cables (FOCs) are increasingly becoming the primary means of transmitting telecommunications over long distances throughout the world. Because FOCs are able to carry a much greater bandwidth than wire, microwaves, or satellites, they are rapidly replacing those means of voice, video, and data transmission for long-distance communications. In addition, FOCs have the advantage of being relatively small, are unaffected by electromagnetic interference or voltage irregularities, do not create the delay inherent in satellite communications, and cannot be compromised by electronic eavesdropping. As a result of the increasing use of FOCs, many satellites are now being used to provide only backup telecommunications coverage or to serve remote areas of the world.

FOCs are being placed both on land and across oceans and waterways. Since 1988, when the first FOC was laid across the Atlantic Ocean, an estimated 230,000 miles of oceanic FOC has been installed. It is estimated that an additional 180,000 miles of oceanic FOC will be laid by the year 2000. By 2003, the first phase of "Project OXYGEN™," a private global undersea optical fiber cable network with 9~~7~~9 landing points in 7~~6~~8 countries financed by Project Oxygen Ltd., based in Bermuda, alone will add yet another 16~~9~~8,000 km (approximately 100,000 miles) of FOC.

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A FOC is typically two to three inches in diameter. Most of the cable consists of insulation or metal sheathing and armor. The glass fiber core may be only one-half inch in diameter. In-line, direct current (DC) powered amplification repeaters, which maintain the strength of the light signal, are placed at regular intervals along most FOCs. Shorter FOCs, such as those crossing a channel or strait, often do not require repeaters.

The estimated useful life of a FOC is reported to be 25 years, although none currently in operation are nearly that old. The capacity of a FOC is measured in gigabits per second. Often, a FOC will begin operation at one capacity and later be upgraded. While the first FOCs carried on the order of 45 megabits per second, new "third generation" cables are projected to carry as much as 400 gigabits per second. FOC systems are typically constructed in what is termed a "ring structure." This allows the system to continue to operate, or "self heal," in the event part of a FOC is damaged. The most frequent cause of damage to a FOC is from fishing boats and associated gear.

The sites where FOCs come onshore are termed "landings." A landing consists of a means to bring the cables from the water to the land, such as underground conduits, to a receiving building containing the electronic equipment necessary to send and receive the FOC signal and generators to provide the DC power for the amplifiers.

Traditionally, FOCs have been owned and operated by consortiums of companies, with each carrier receiving the rights to use a specific amount of bandwidth over some or all of the cable. However, many new or proposed FOCs are now being financed primarily by private companies that are, in turn, stockholder held. Capacity on these investor-owned FOCs is not pre-committed to the investors, but rather made available to any carrier (including the investors) on a flexible or "as needed" basis. In this way, carriers do not have to commit capital on a long-term basis to construct new FOCs, but instead can sell or purchase capacity when required. A current project in south Florida involved the installation of nine conduits, of which only three are currently "sold," the others awaiting "need" and a paying customer.

FOC participation costs vary depending on the purpose of the cable and the needs of the user. According to sales information and the "Project OXYGEN™" web site, "http://www.projectoxygen.com/", customers can buy access capacity at four levels:

> *Those who pay US $200 million will receive 100 gigabits/second of access capacity; US $100 million buys 30 gigabits/second; US $50 million buys 10 gigabits/second; and US $10 million, 1.24 gigabits/second. Customers will also pay an annual fixed operations and maintenance fee equal to 6% of their capacity purchase cost.*

Typically, the costs of constructing a FOC are reported to be from $26,000 to $46,000 per mile. A disruption in a FOC is reported to result in a loss to the operator of $5,000 or more per minute.

05/10/2000 04:24 9047408463 FL PEER L ZUCKERMAN PAGE 02

According to industry representatives, the recent installation of nine, four-inch conduits "was designed to accommodate the reasonable foreseeable demand from AT&T's internal perspectives." Those conduits not used by AT&T will be sold or leased to other cable conglomerates or investors.

Numerous FOCs are being installed within the State, and DEP is~~we are~~ seeing an increase in the number of proposed off-shore installations. Recently, ~~involving four~~five different applications were received~~nts~~, several~~often~~ representing international conglomerates, with a total of 46 or more cables, to provide fiber optic communications with Europe, South America, and the Caribbean. The DEP recently had a meeting with a company proposing an offshore cable, parallel to the coast, for providing fiber optic communications for the Atlantic Seaboard states. The company stated an offshore installation, as opposed to a traditional terrestrial route, was desirable because of ease of construction, space limitations, and fees associated with using existing road, bridge, and railroad rights-of-way, and compliance with local governmental regulations.

Construction Techniques

Offshore, the cable is generally laid directly on the seafloor. FOCs may be routed within abandoned pipelines or their alignments in areas such as the Gulf Coast. Landfall is made by routing the cable into a trench, access hole, or conduit. Installation of the access hole or conduit can be by any one of a variety of techniques including traditional open trench dredging, entrenchment using hydrojets or a plow, or directional drilling. Once the access hole or conduit is in place and buried, new cable arrivals can involve digging (dredging) open an existing conduit and pulling in the new arrival.

Onshore, the cables are installed underground using much the same variety of trenching and/or boring techniques as used offshore. To the extent possible, recent projects have used existing road and railroad rights-of-way for cable installation. However, right-of-way ~~-of-way~~ availability may become limited as the number of cables increase. Crossings of wetlands and other surface waters are typically made through a technique of directional drilling from upland to upland. Excavated material may be deposited at the upland end of the drilling operation or removed to an off-site location.

Regulatory and Proprietary (SSL) Programs Related to FOC Installation

Regulatory

Florida's regulations governing the installation, modification, repair, and removal of FOCs vary depending on where the installation is occurring in the state; i.e., in the Panhandle within the boundaries of the Northwest Florida Water Management District (NWFWMD) or elsewhere in the state. In either case, the jurisdiction of the permit program extends offshore to the limits of the state's territorial waters.

05/10/2000 04:24 9047408463 FL PEER L ZUCKERMAN PAGE 03

In the Panhandle, within the boundaries of the NWFWMD, a Department wetland resource permit (WRP) is required under section 373.4145, F.S., and chapter 62-312, F.A.C., for the construction, installation, repair, and removal of FOCs within surface waters of the state. These surface waters are described in section 62-312.030, F.A.C., to include the Gulf of Mexico, bays, bayous, sounds, estuaries, rivers, streams, natural lakes that are greater than 10 acres in size and not owned entirely by one person other than the state, and all natural and man-made tributaries to these waters to the landward extent of wetland vegetation (as defined in chapter 62-340, F.A.C.) contiguous with these waters. Permits are not required for exempt activities, as noted below, or for construction in isolated wetlands or uplands.

Elsewhere in the state, the installation, alteration, operation, maintenance, removal, and abandonment of FOCs are subject to the environmental resource permit (ERP) requirements of part IV of chapter 373, F.S., and the applicable Department and Water Management District (Suwannee River, St. Johns River, Southwest Florida, and South Florida WMDs) rules, as adopted under chapter 62-330, F.A.C. The regulatory program for linear projects, such as FOCs, is administered by the Department under operating agreements between the Department and the WMDs as adopted under chapter 62-113, F.A.C. Generally, any installation or repair of a FOC involving the disturbance of the soil surface or otherwise affecting surface water flows, whether in uplands, wetlands, or other surface waters, is considered to be a "work" that requires an ERP. However, there are exceptions for certain exempt activities or activities that fail to "trip" the various WMD permitting thresholds.

Exempt Activities and Noticed General Permits

Both the WRP and ERP programs share two statutory exemptions from permit application and processing requirements under certain circumstances. Section 403.813(2)(m), F.S., provides an exemption for installation (except in Class I and II waters and aquatic preserves) of lines laid on, or embedded in, the bottoms of waters in the state. Section 403.813(2)(n), F.S., provides an exemption for replacement or repair of lines that are laid on, or embedded in, the bottoms of waters of the state. These exemptions are applicable for the FOC segments that are laid on or embedded in the bottoms of the offshore waters of the Gulf of Mexico and Atlantic Ocean. Onshore, FOCs typically are not laid on or embedded in the bottoms of surface waters, and hence these exemptions generally will not apply to inland cable alignments. Additional exemptions may be granted on a case-by-case basis by the Department or a WMD for *de minimis* activities that have negligible individual or cumulative impact on the environment under section 62-4.040(1), F.A.C. (in the Panhandle) or~~and~~ section 373.406(6), F.S. (elsewhere in the state).

In the Panhandle, WRPs are not required for installations in uplands, to the extent the work does not involve any dredging or filling in surface waters of the state, including wetlands connected to those waters. Permits also are not required for lines placed *under* the bottoms of wetlands or surface waters, such as when lines are installed by directional

05/10/2000 04:24 9047408463 FL PEER L ZUCKERMAN PAGE 04