

Legend	
	Project River Mile
	Instream Flow Focus Area (Upper and Lower Extent)
	Riverine Physiography Area
	Proposed Project Area

Potential Beaver Dams Structure Status from Imagery	
	Intact
	Partial
	Undetermined
	Not Intact
	Field Verified 2013

**ALASKA**  
ENERGY AUTHORITY

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-22**

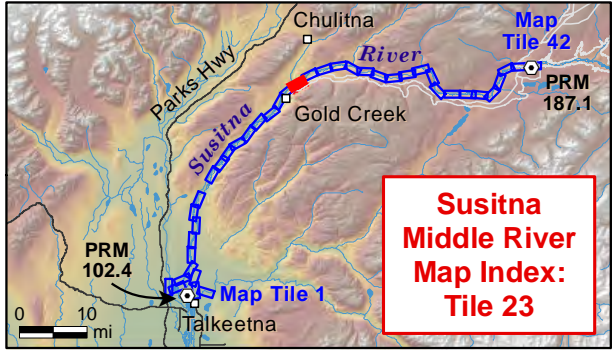
Map scale = 1:10,000

0 500 1,000  
Feet

0 100 200 300  
Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





**Legend**

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

**Potential Beaver Dams  
Structure Status from Imagery**

- Intact
- Partial
- Undetermined
- Not Intact
- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

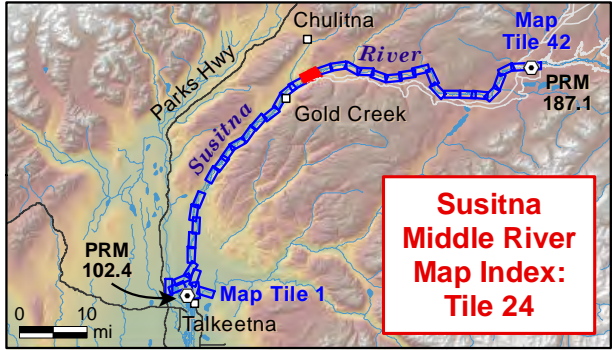
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

- Intact
- Partial
- Undetermined
- Not Intact
- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-24

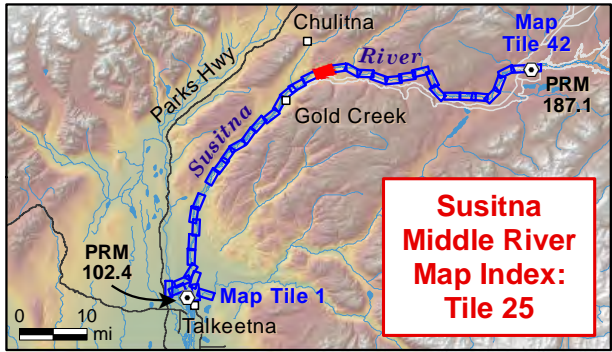
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
- Intact
  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde



**Figure A-25**

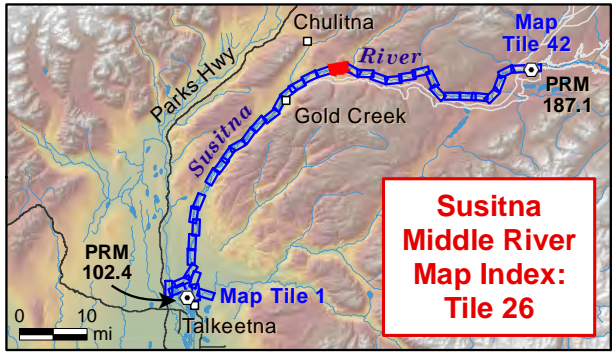
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
- Intact
  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPP\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-26**

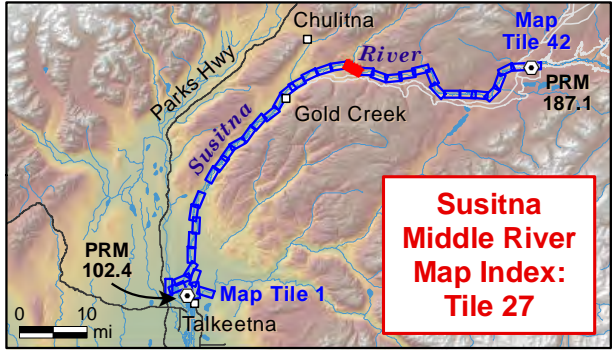
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

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- Partial
- Undetermined
- Not Intact
- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-27

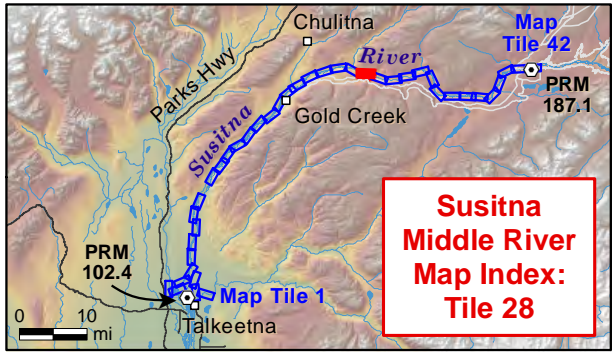
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

- Intact
- Partial
- Undetermined
- Not Intact
- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-28

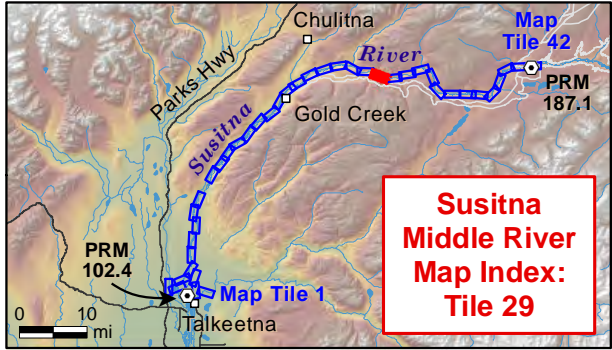
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

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- Partial
- Undetermined
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- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-29

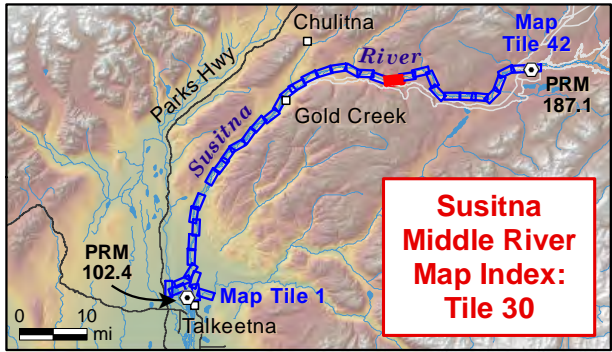
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
- Intact
  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-30**

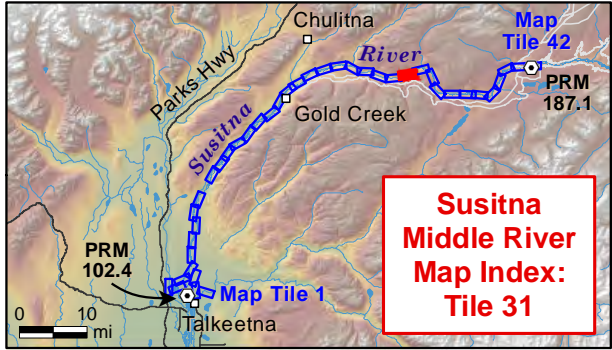
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
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- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

- Intact
- Partial
- Undetermined
- Not Intact
- Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-31

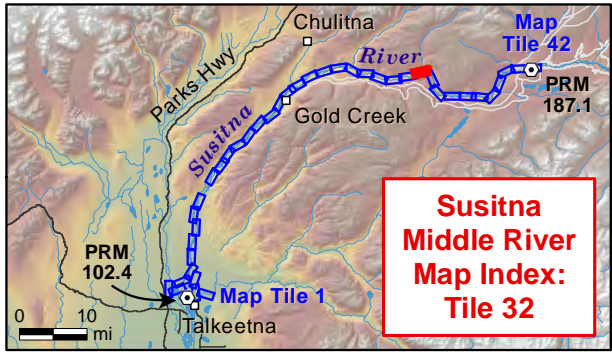
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
- Intact
  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-32**

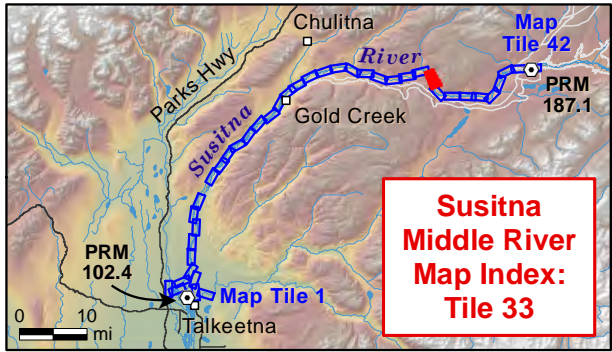
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





**Legend**

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
- Riverine Physiography Area
- Proposed Project Area

**Potential Beaver Dams  
Structure Status from Imagery**

- Intact
- Partial
- Undetermined
- Not Intact
- Field Verified 2013

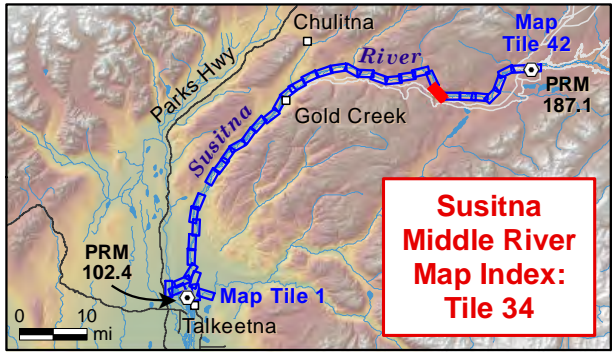
Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-33**

Map scale = 1:10,000

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
- Intact
  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-34**

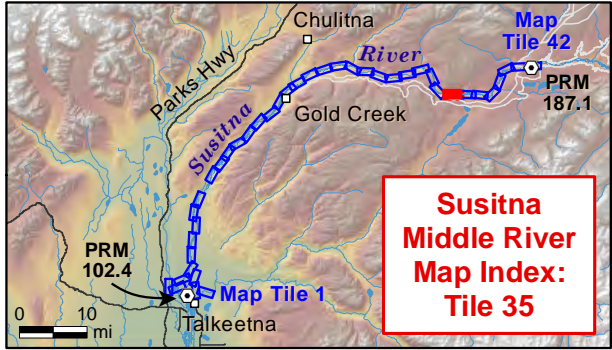
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





**Legend**

Project River Mile

Instream Flow Focus Area (Upper and Lower Extent)

Riverine Physiography Area

Proposed Project Area

**Potential Beaver Dams  
Structure Status from Imagery**

Intact

Partial

Undetermined

Not Intact

Field Verified 2013

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
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Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

Map scale = 1:10,000

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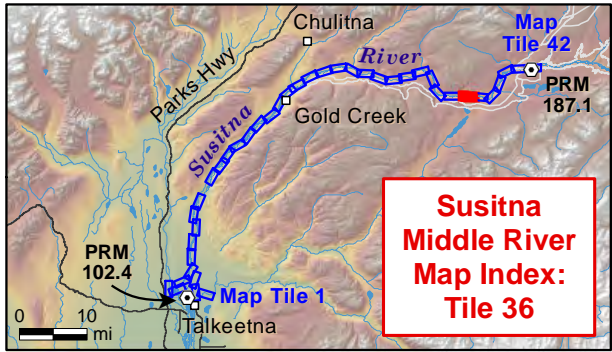
Feet

0100200300

Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





**Legend**

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
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- Proposed Project Area

**Potential Beaver Dams  
Structure Status from Imagery**

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- Field Verified 2013

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Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-36**

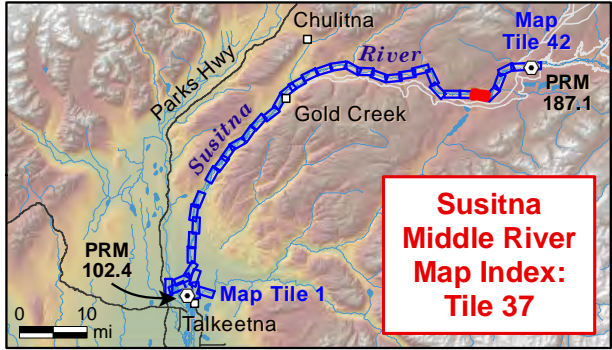
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
- Instream Flow Focus Area (Upper and Lower Extent)
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- Proposed Project Area

### Potential Beaver Dams Structure Status from Imagery

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- Field Verified 2013

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Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-37

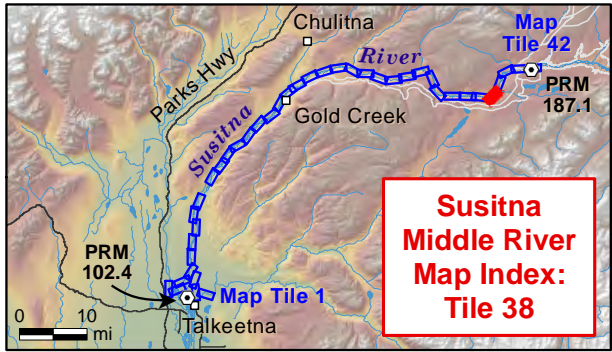
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





### Legend

- Project River Mile
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### Potential Beaver Dams Structure Status from Imagery

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Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-38

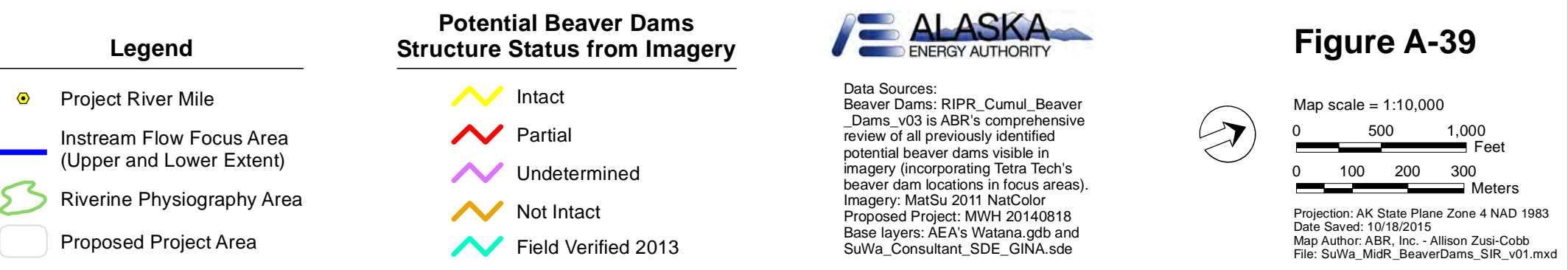
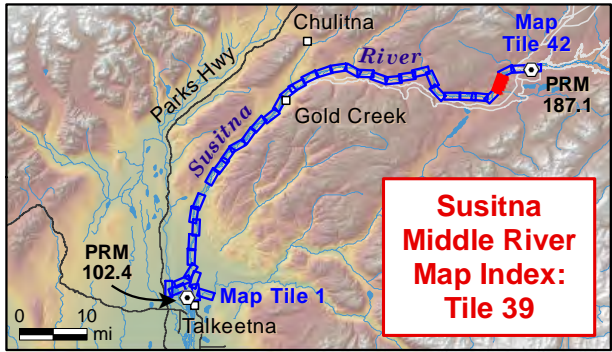
Map scale = 1:10,000

0 500 1,000 Feet

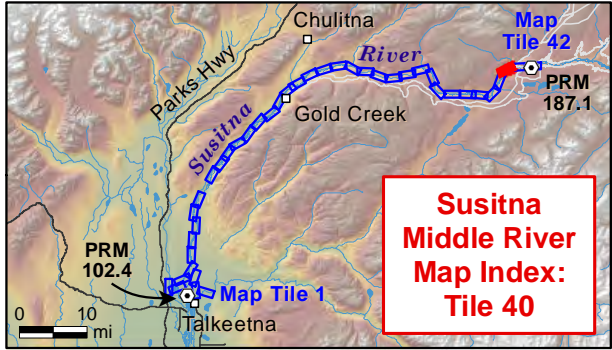
0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd









### Legend

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- Field Verified 2013

Data Sources:  
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Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

### Figure A-40

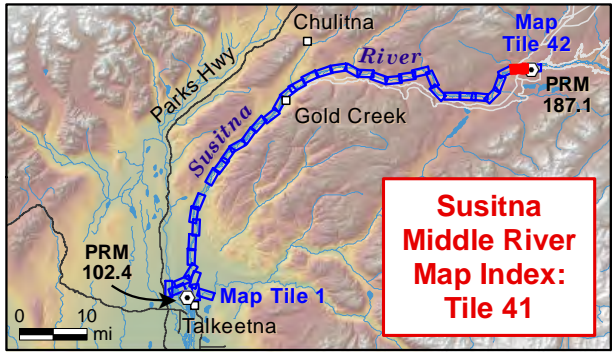
Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





**Legend**

- Project River Mile
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- Undetermined
- Not Intact
- Field Verified 2013

**ALASKA ENERGY AUTHORITY**

Data Sources:  
Beaver Dams: RIPR\_Cumul\_Beaver\_Dams\_v03 is ABR's comprehensive review of all previously identified potential beaver dams visible in imagery (incorporating Tetra Tech's beaver dam locations in focus areas).  
Imagery: MatSu 2011 NatColor  
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Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

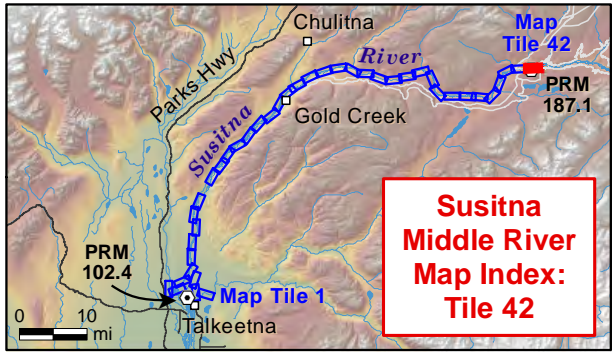
**Figure A-41**

Map scale = 1:10,000

0 500 1,000 Feet  
0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd





- Legend**
- Project River Mile
  - Instream Flow Focus Area (Upper and Lower Extent)
  - Riverine Physiography Area
  - Proposed Project Area

- Potential Beaver Dams Structure Status from Imagery**
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  - Partial
  - Undetermined
  - Not Intact
  - Field Verified 2013

**ALASKA ENERGY AUTHORITY**

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Imagery: MatSu 2011 NatColor  
Proposed Project: MWH 20140818  
Base layers: AEA's Watana.gdb and SuWa\_Consultant\_SDE\_GINA.sde

**Figure A-42**

Map scale = 1:10,000

0 500 1,000 Feet

0 100 200 300 Meters

Projection: AK State Plane Zone 4 NAD 1983  
Date Saved: 10/18/2015  
Map Author: ABR, Inc. - Allison Zusi-Cobb  
File: SuWa\_MidR\_BeaverDams\_SIR\_v01.mxd