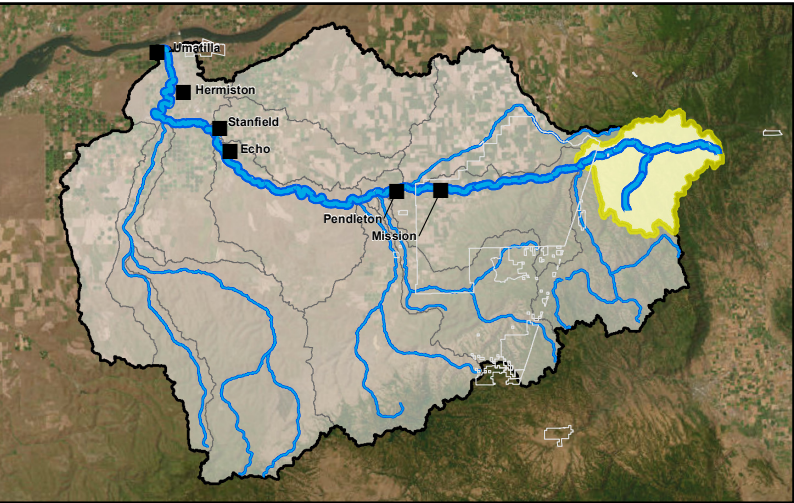
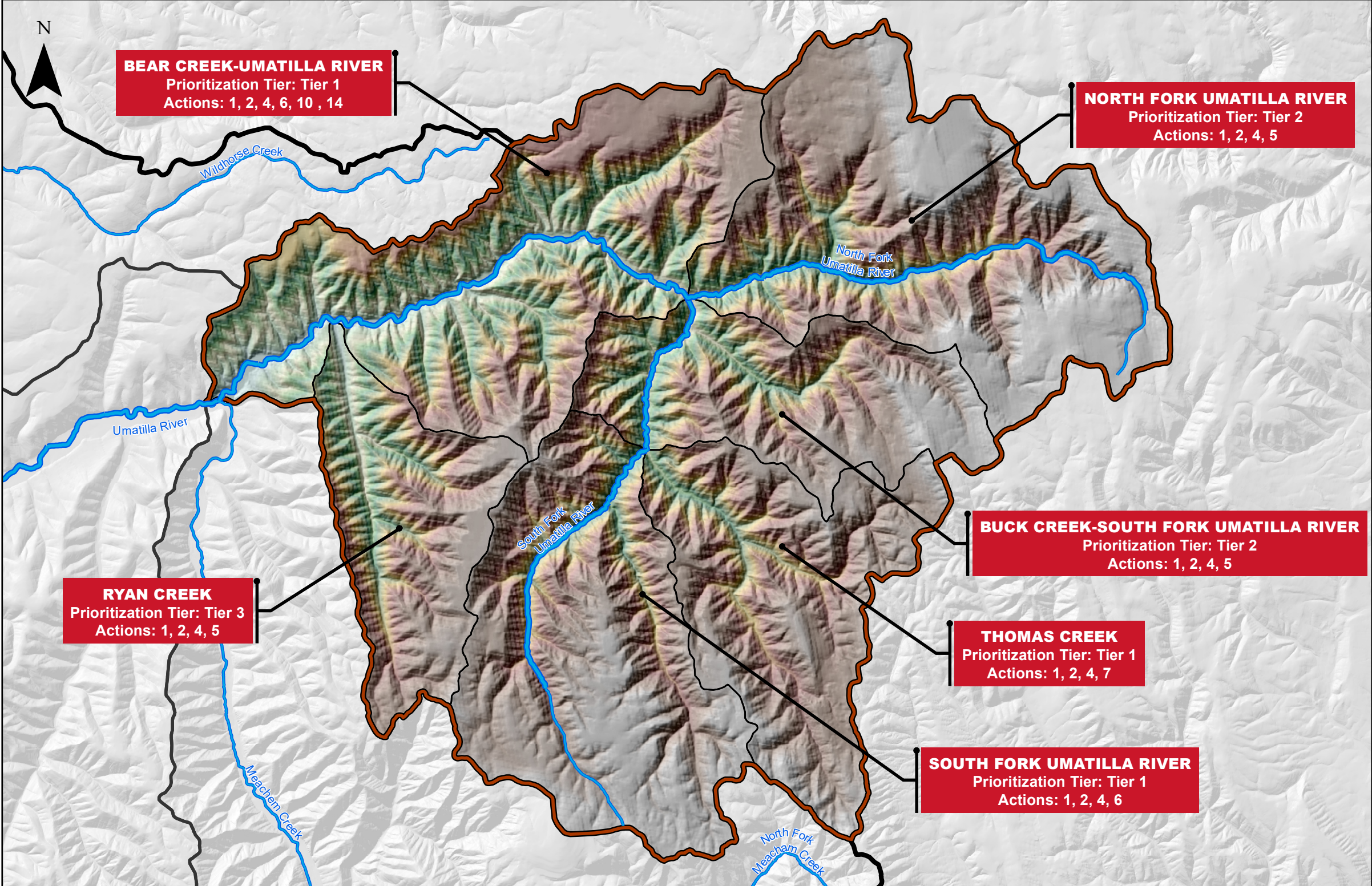


Watershed Opportunities

HUC10 Watershed Name:  
Headwaters Umatilla River Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

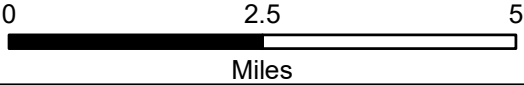


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 5500  
Low : 1750

Umatilla River Assessment  
Subbasin Uplands Map Book

Headwaters Umatilla River Watershed  
Restoration Actions

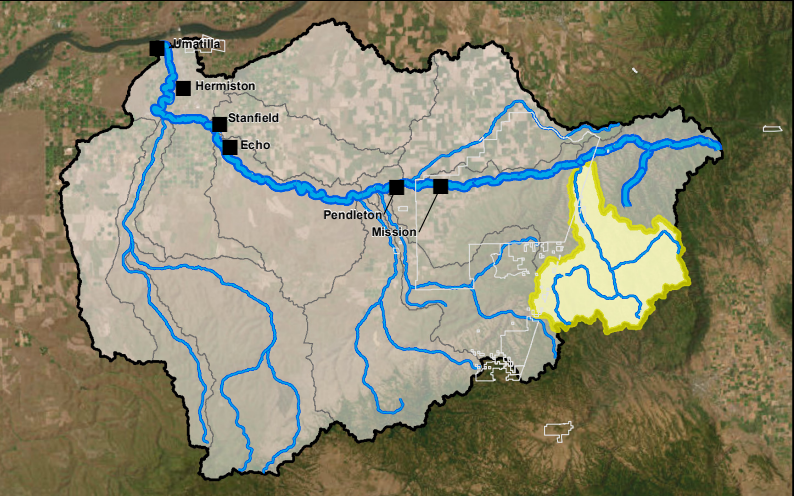
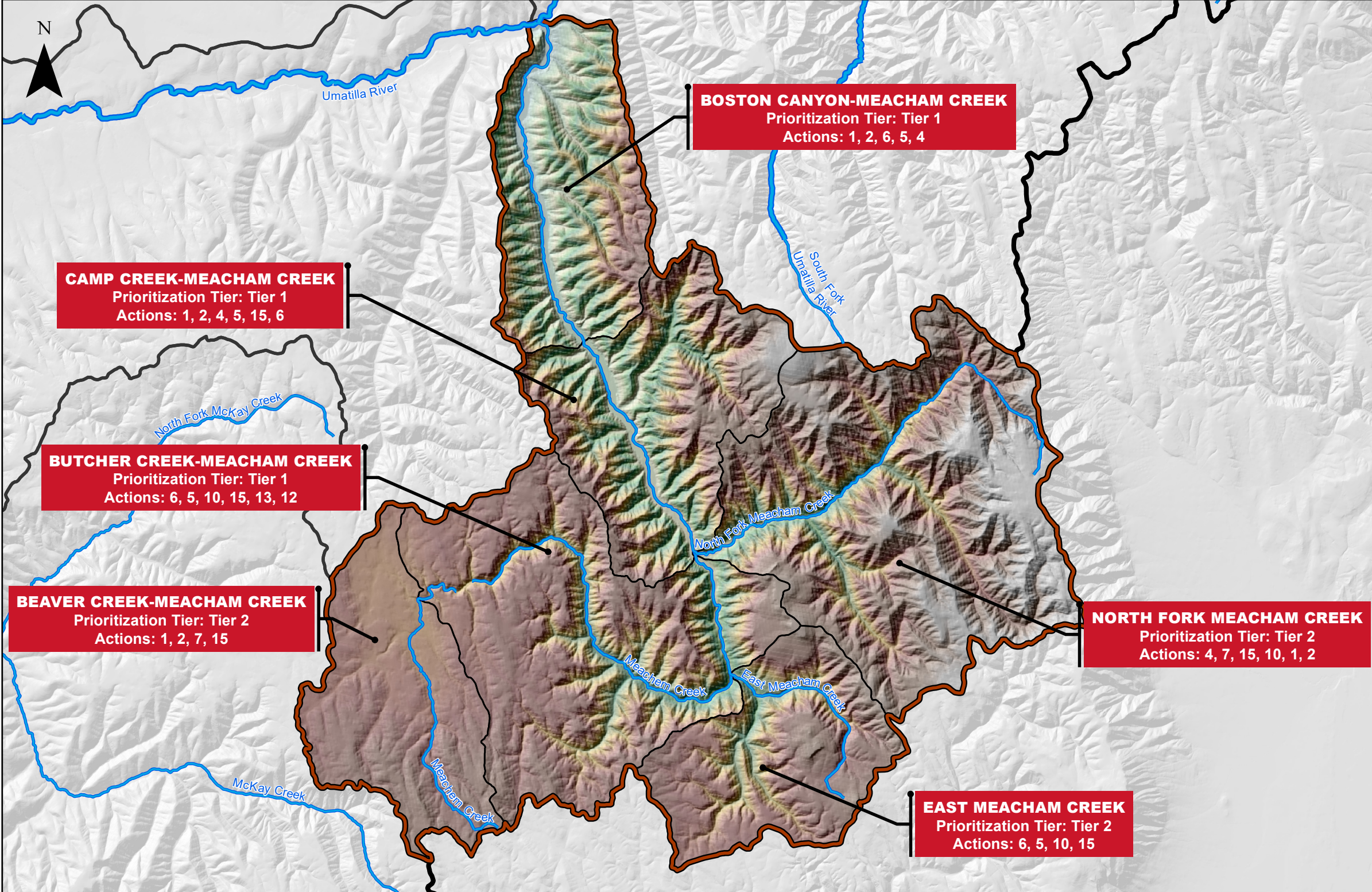




Watershed Opportunities

HUC10 Watershed Name:  
Meacham Creek Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

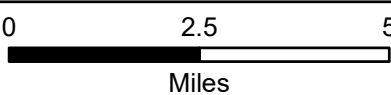


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)**  
High : 6000  
Low : 1750

Umatilla River Assessment  
Subbasin Uplands Map Book

Meacham Creek Watershed  
Restoration Actions



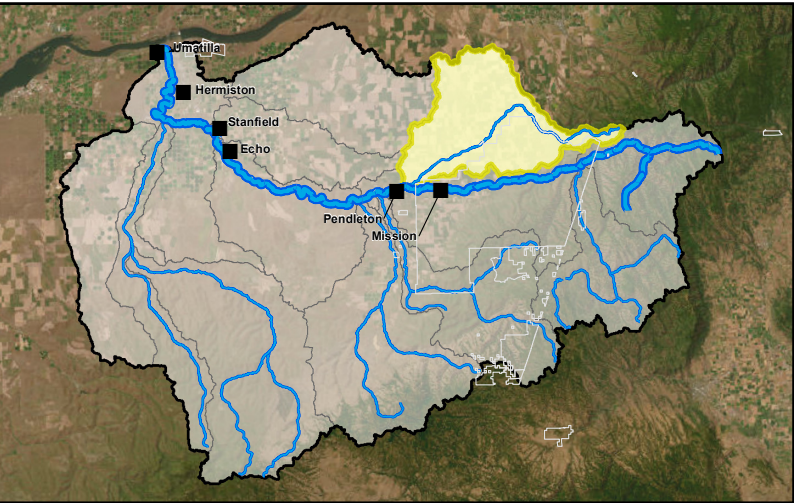
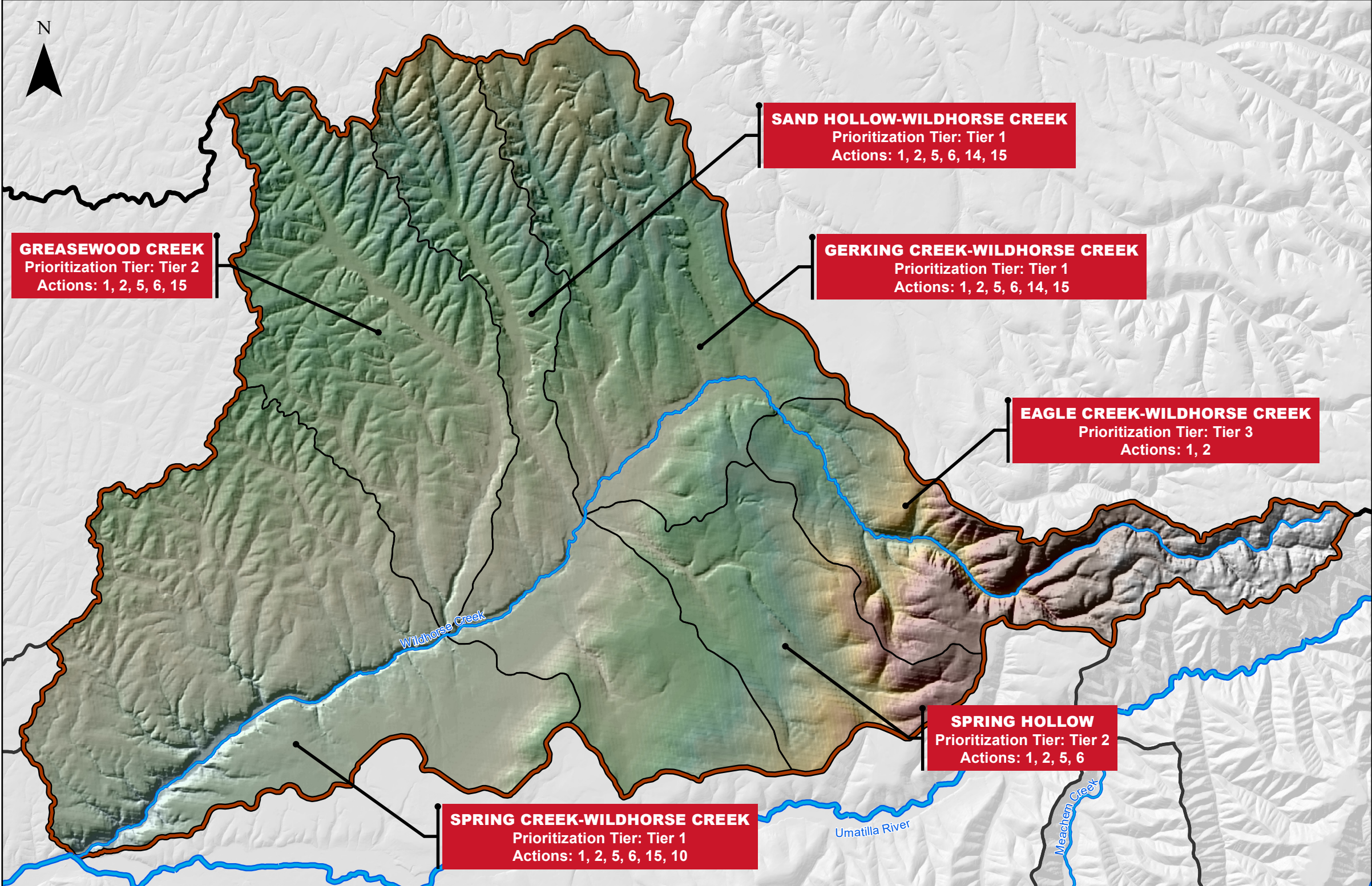


Watershed Opportunities

HUC10 Watershed Name:  
Wildhorse Creek Watershed

All Potential Restoration Actions:

- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
- (2) Land Management: (Grazing Plans, Fire management, etc.)
- (3) Reduce - Mitigate Point or Non-Point Source Impacts
- (4) Nutrients Additions (carcasses)
- (5) Upland Vegetation Treatment - Management
- (6) Road Grading - Drainage Improvements
- (7) Road Decommissioning or Abandonment
- (8) Water Management-Improve Irrigation Efficiency
- (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
- (10) Remove Non-native Plants
- (11) Off--Site Water Developments
- (12) Riparian Buffer Strip, Planting
- (13) Selective Thinning
- (14) Beaver Re-introduction or Management
- (15) Riparian Fencing

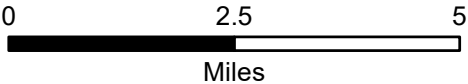


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 3800  
Low : 1000

Umatilla River Assessment  
Subbasin Uplands Map Book

Wildhorse Creek Watershed  
Restoration Actions

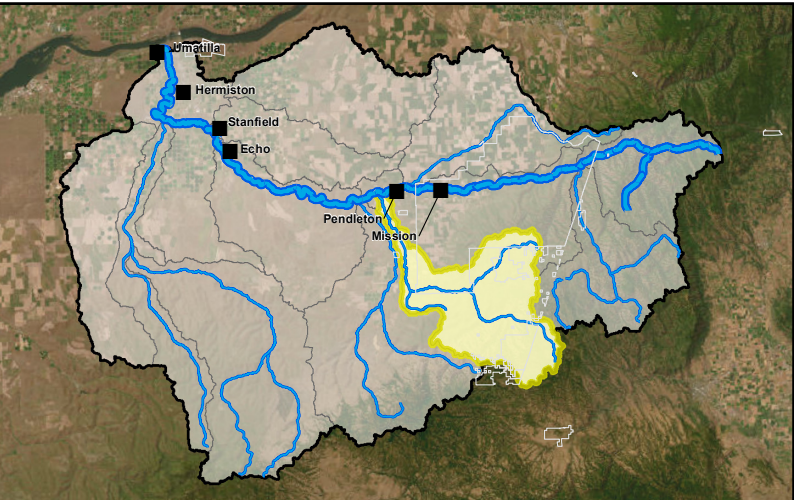
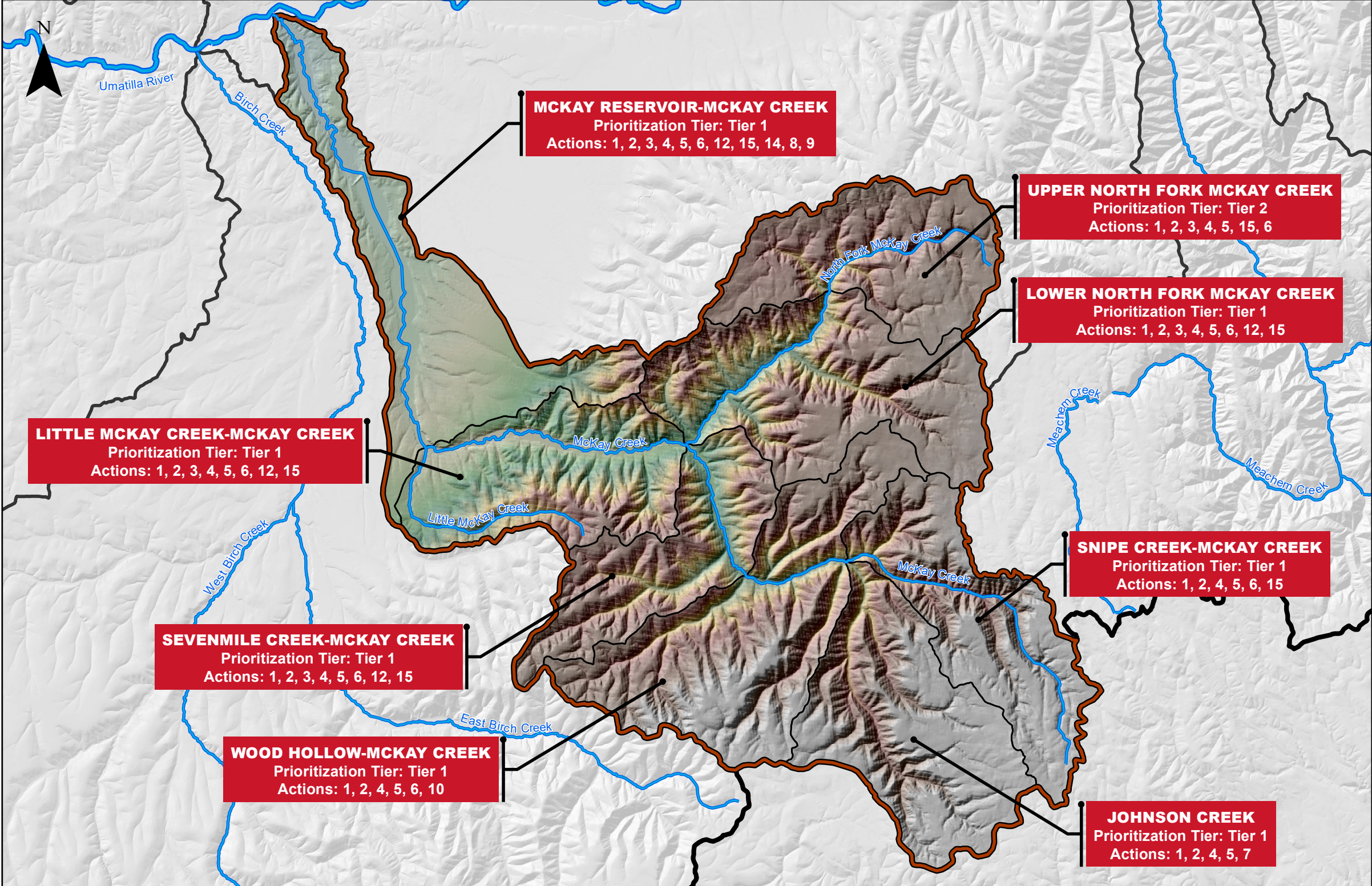




Watershed Opportunities

HUC10 Watershed Name:  
McKay Creek Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

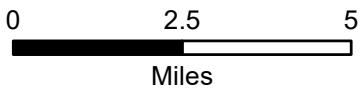


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 4800  
Low : 1000

Umatilla River Assessment  
Subbasin Uplands Map Book

McKay Creek Watershed  
Restoration Actions



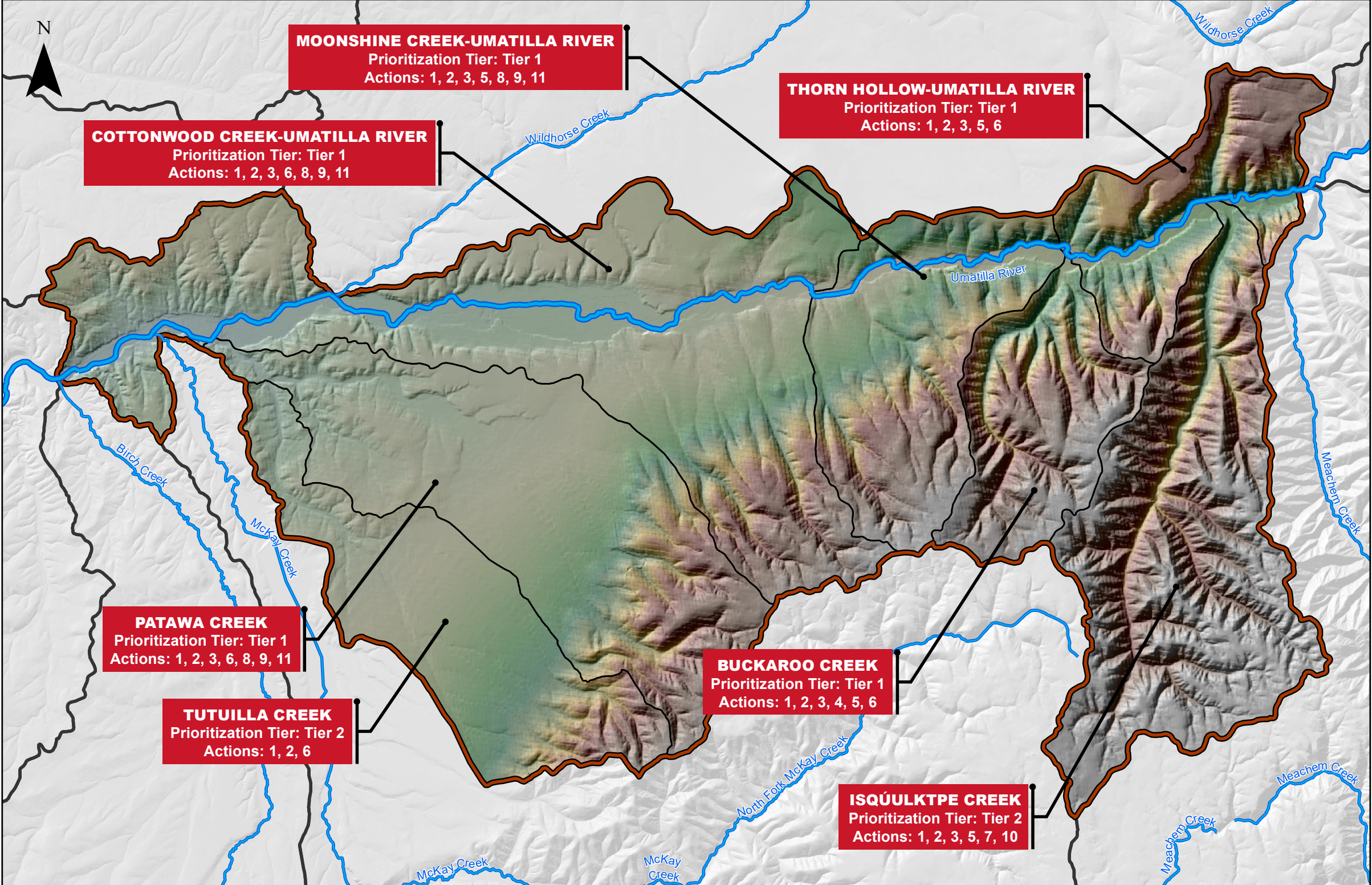


Watershed Opportunities

HUC10 Watershed Name:  
Mission Creek-Umatilla River Watershed

All Potential Restoration Actions:

- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
- (2) Land Management: (Grazing Plans, Fire management, etc.)
- (3) Reduce - Mitigate Point or Non-Point Source Impacts
- (4) Nutrients Additions (carcasses)
- (5) Upland Vegetation Treatment - Management
- (6) Road Grading - Drainage Improvements
- (7) Road Decommissioning or Abandonment
- (8) Water Management-Improve Irrigation Efficiency
- (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
- (10) Remove Non-native Plants
- (11) Off--Site Water Developments
- (12) Riparian Buffer Strip, Planting
- (13) Selective Thinning
- (14) Beaver Re-introduction or Management
- (15) Riparian Fencing

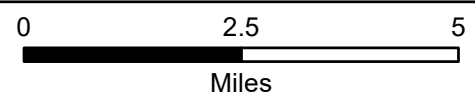


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 4250  
Low : 900

Umatilla River Assessment  
Subbasin Uplands Map Book

Mission Creek-Umatilla River Watershed  
Restoration Actions

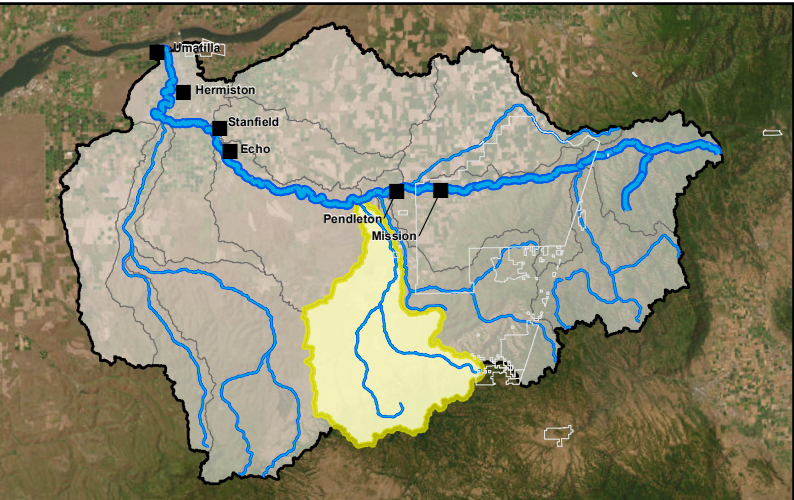
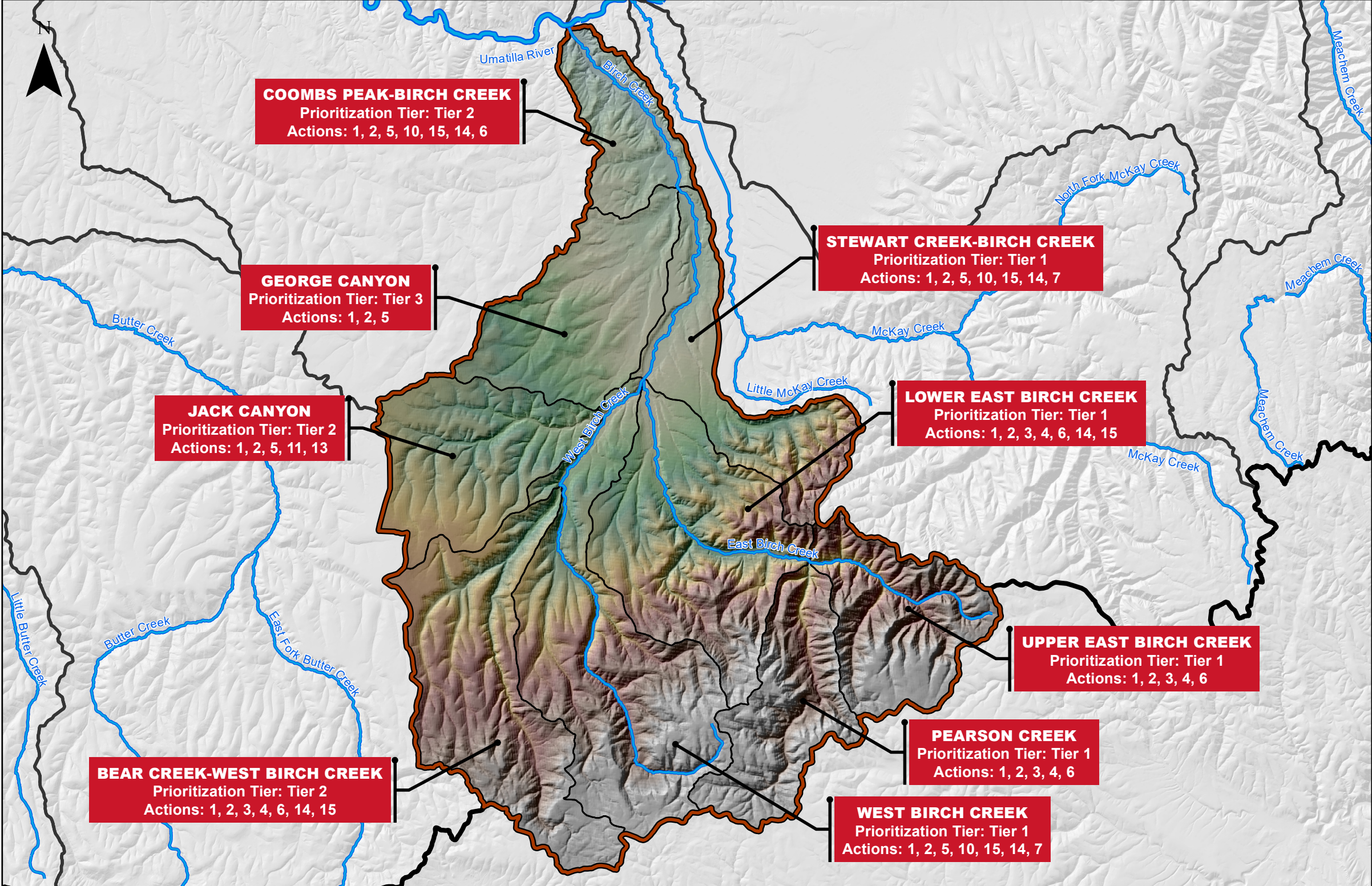




Watershed Opportunities

HUC10 Watershed Name:  
Birch Creek Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

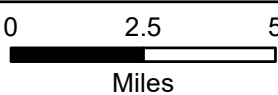


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)**  
High : 5250  
Low : 900

Umatilla River Assessment  
Subbasin Uplands Map Book

Birch Creek Watershed  
Restoration Actions

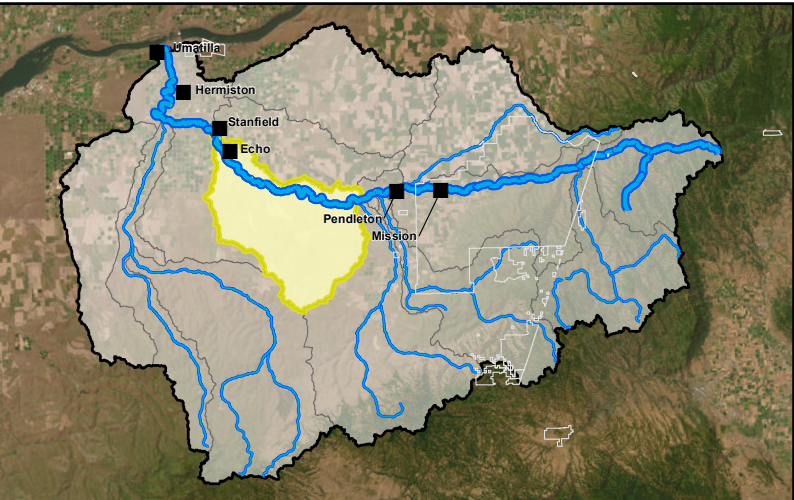
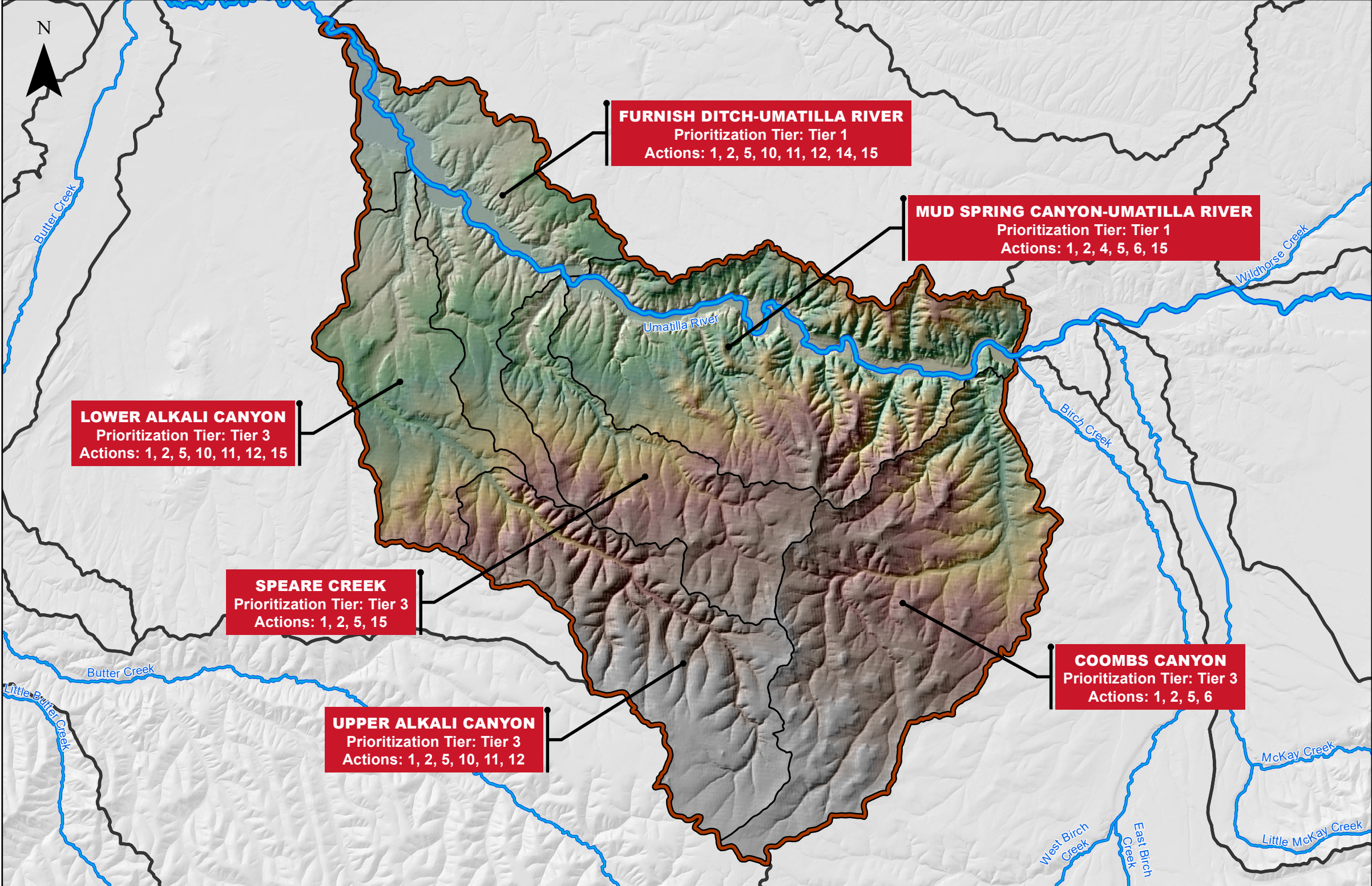




Watershed Opportunities

HUC10 Watershed Name:  
Alkali Canyon-Umatilla River Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

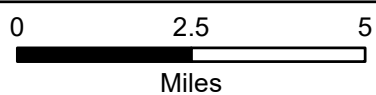


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 2900  
Low : 500

Umatilla River Assessment  
Subbasin Uplands Map Book

Alkali Canyon-Umatilla River Watershed  
Restoration Actions

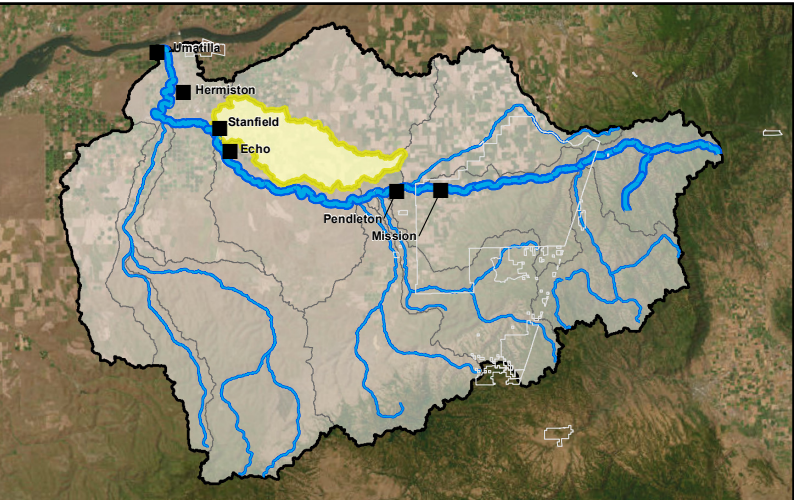
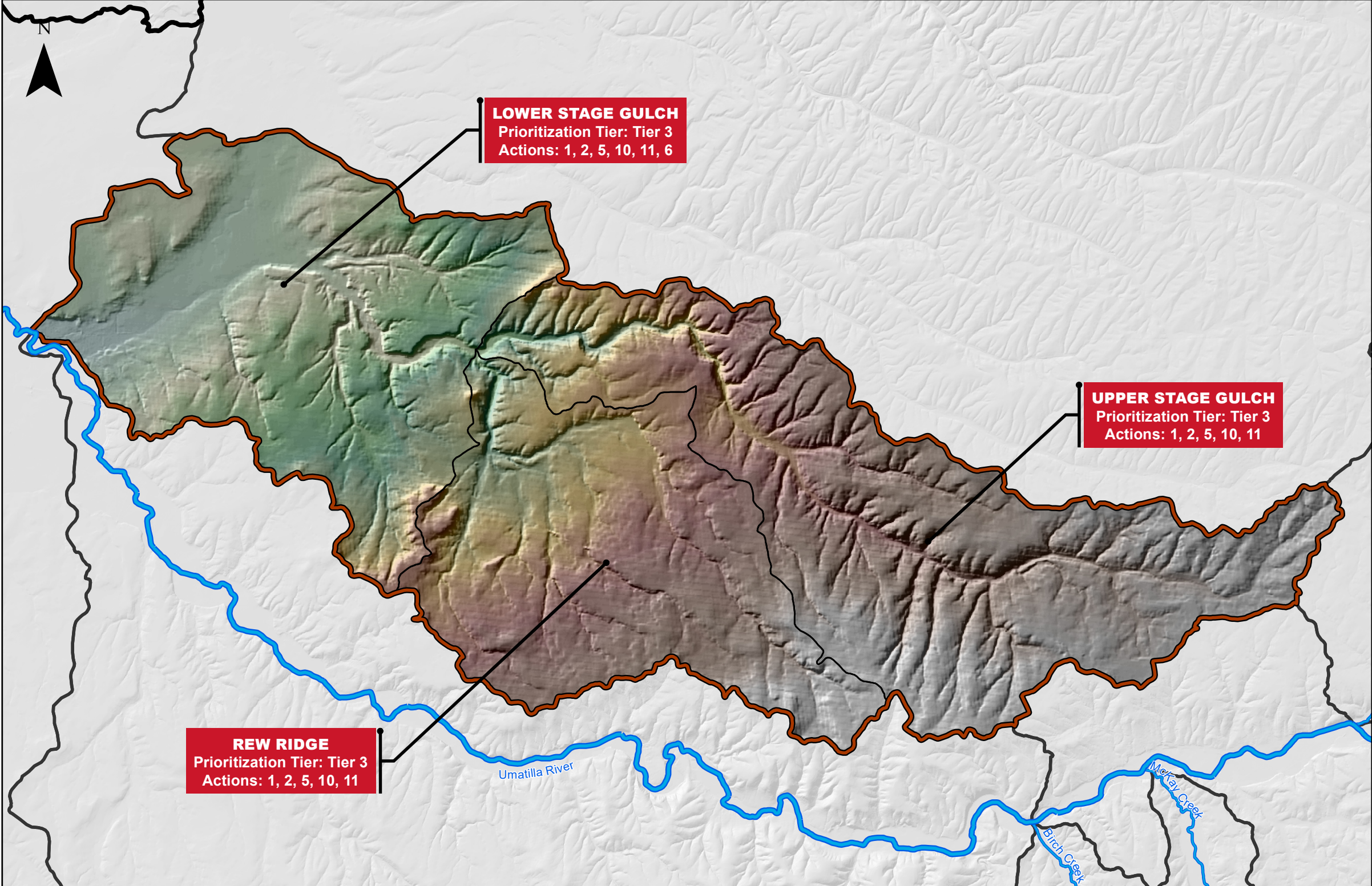




Watershed Opportunities

HUC10 Watershed Name:  
Stage Gulch Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing

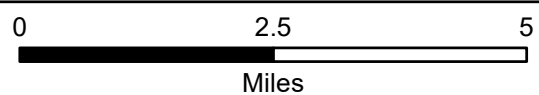


Legend

- 2020 Umatilla River Centerline
  - HUC8 Major Streams
  - Umatilla Subbasin
  - HUC10 Watersheds
  - HUC12 Subwatersheds
  - Watershed in focus
- Elevation (in feet)  
High : 1750  
Low : 500

Umatilla River Assessment  
Subbasin Uplands Map Book

Stage Gulch Watershed  
Restoration Actions



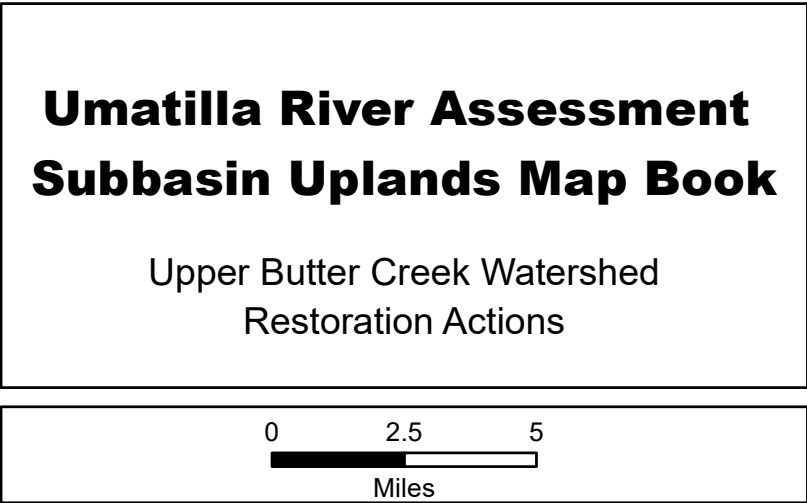
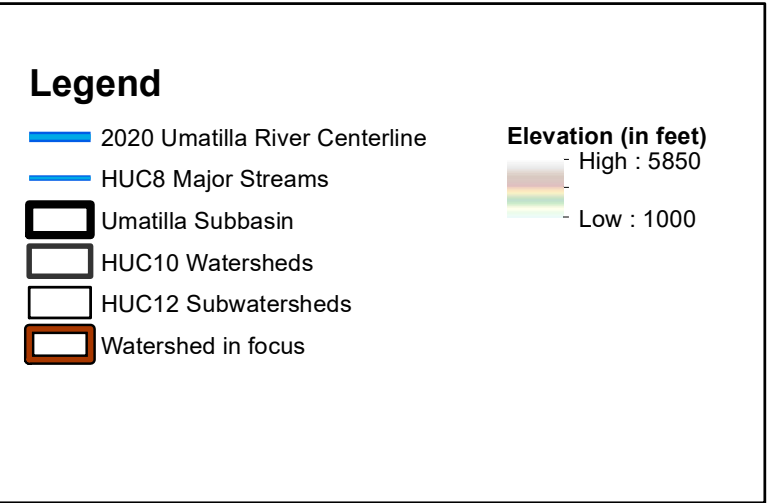
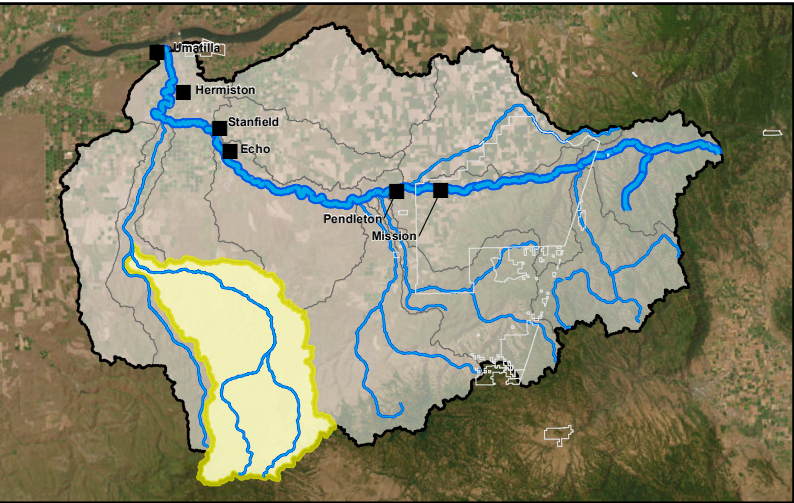
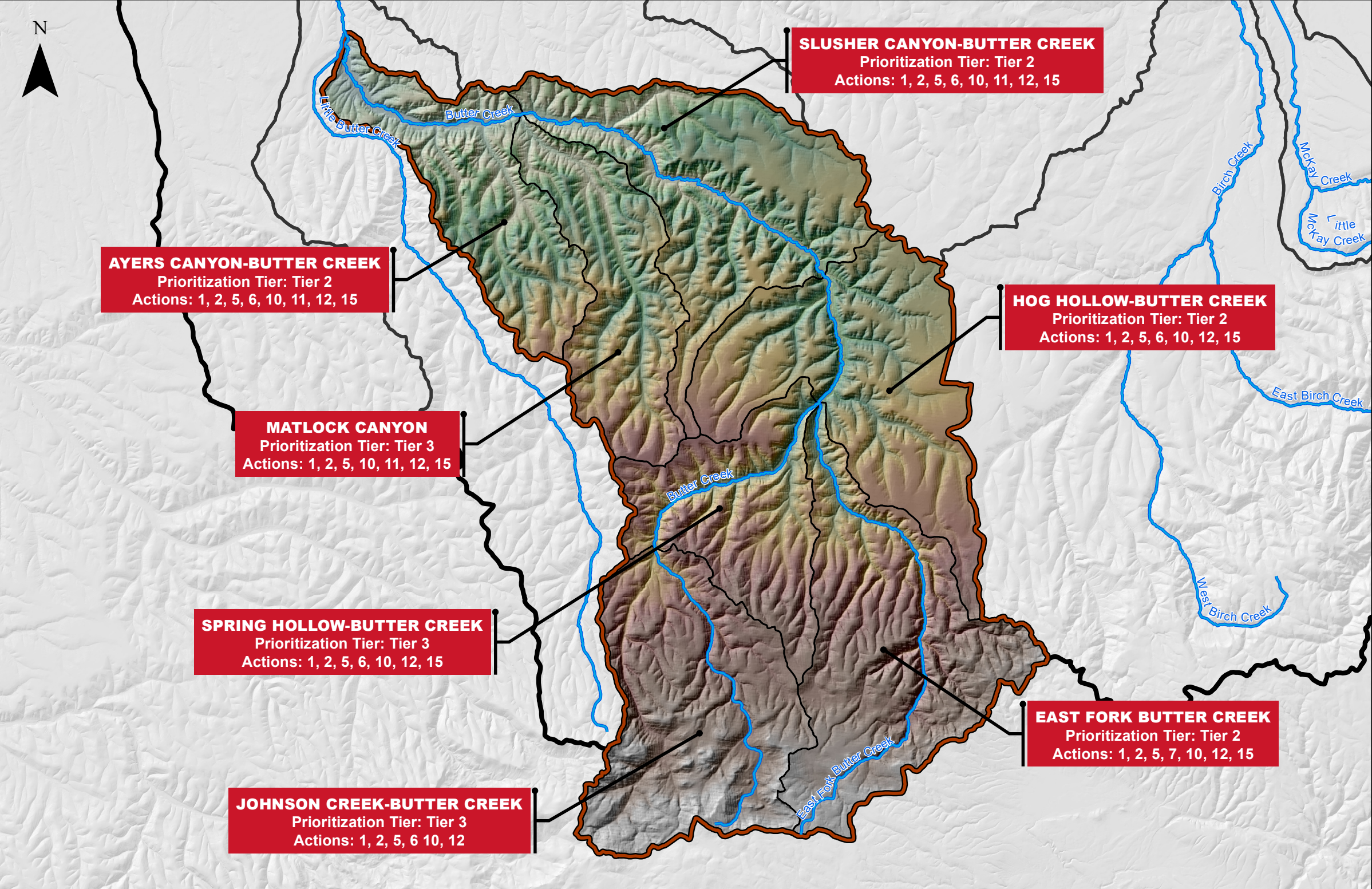


# Watershed Opportunities

**HUC10 Watershed Name:**  
Upper Butter Creek Watershed

## All Potential Restoration Actions:

- (1) Protection: (Acquisitions, Easements, Coop. Agreements)**
- (2) Land Management: (Grazing Plans, Fire management, etc.)**
- (3) Reduce - Mitigate Point or Non-Point Source Impacts
- (4) Nutrients Additions (carcasses)
- (5) Upland Vegetation Treatment - Management**
- (6) Road Grading - Drainage Improvements**
- (7) Road Decommissioning or Abandonment**
- (8) Water Management-Improve Irrigation Efficiency
- (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
- (10) Remove Non-native Plants**
- (11) Off--Site Water Developments**
- (12) Riparian Buffer Strip, Planting**
- (13) Selective Thinning
- (14) Beaver Re-introduction or Management
- (15) Riparian Fencing**

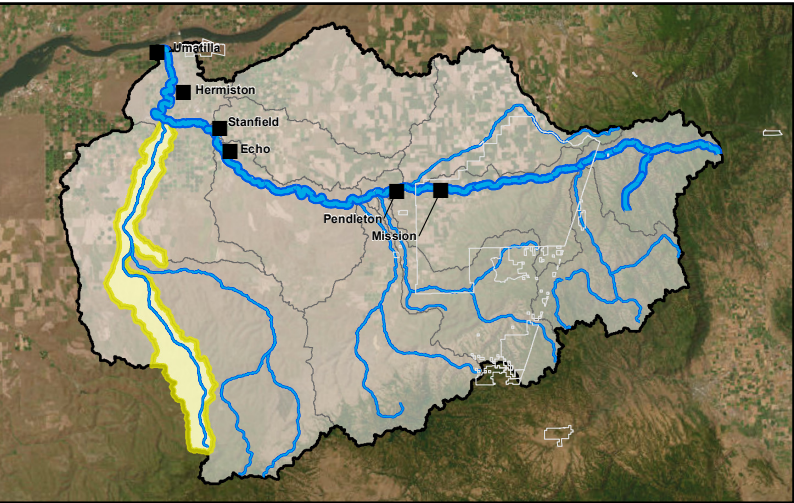
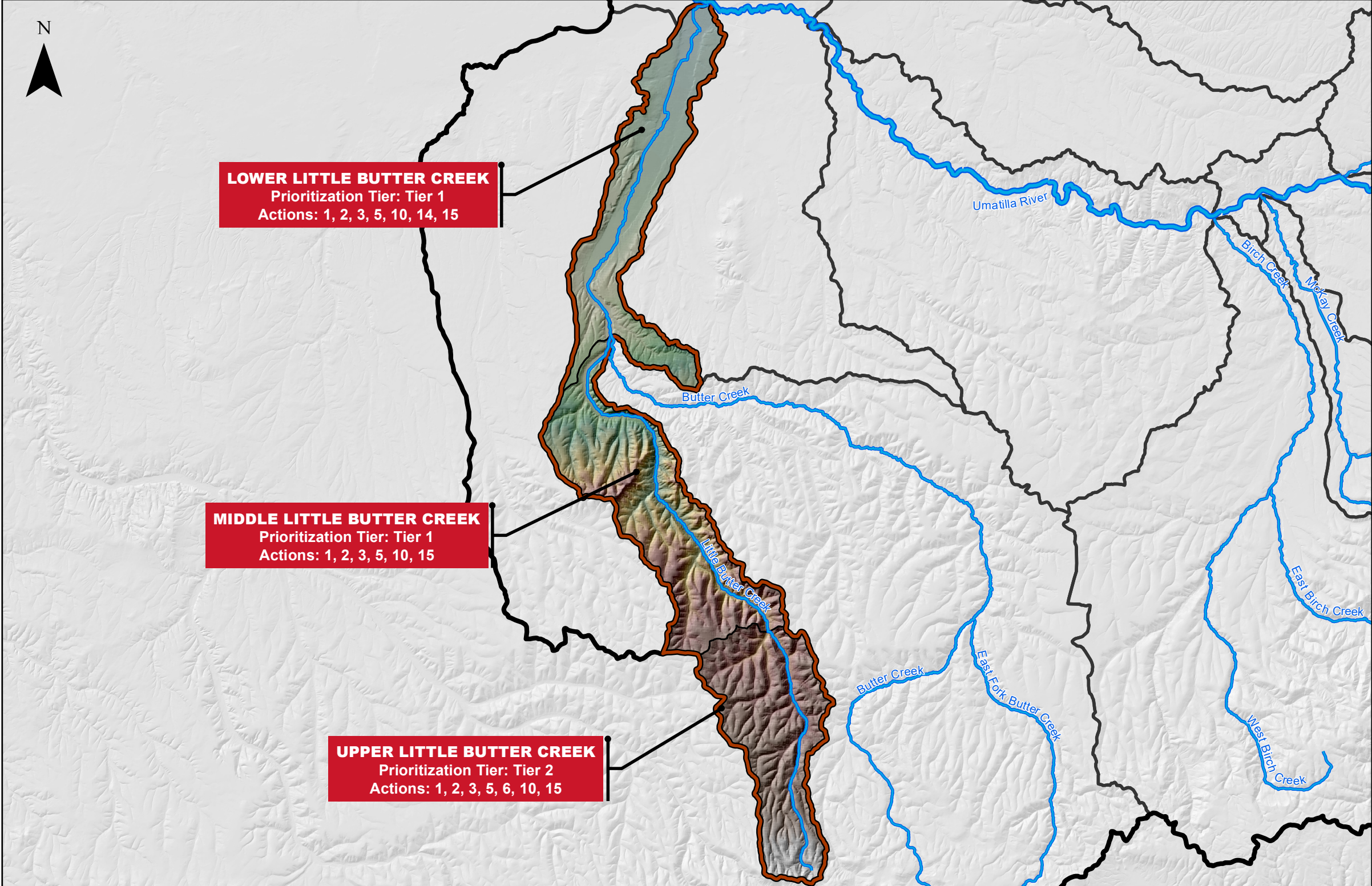




Watershed Opportunities

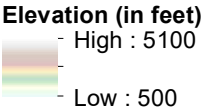
HUC10 Watershed Name:  
Lower Butter Creek Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing



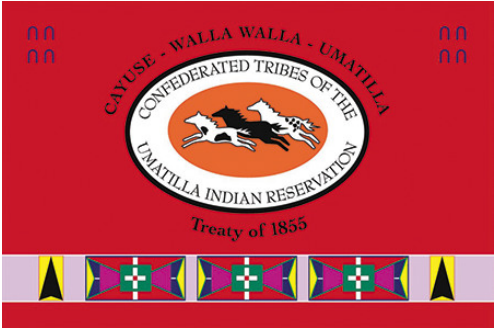
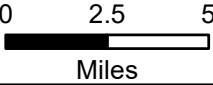
Legend

- 2020 Umatilla River Centerline
- HUC8 Major Streams
- Umatilla Subbasin
- HUC10 Watersheds
- HUC12 Subwatersheds
- Watershed in focus



Umatilla River Assessment  
Subbasin Uplands Map Book

Lower Butter Creek Watershed  
Restoration Actions

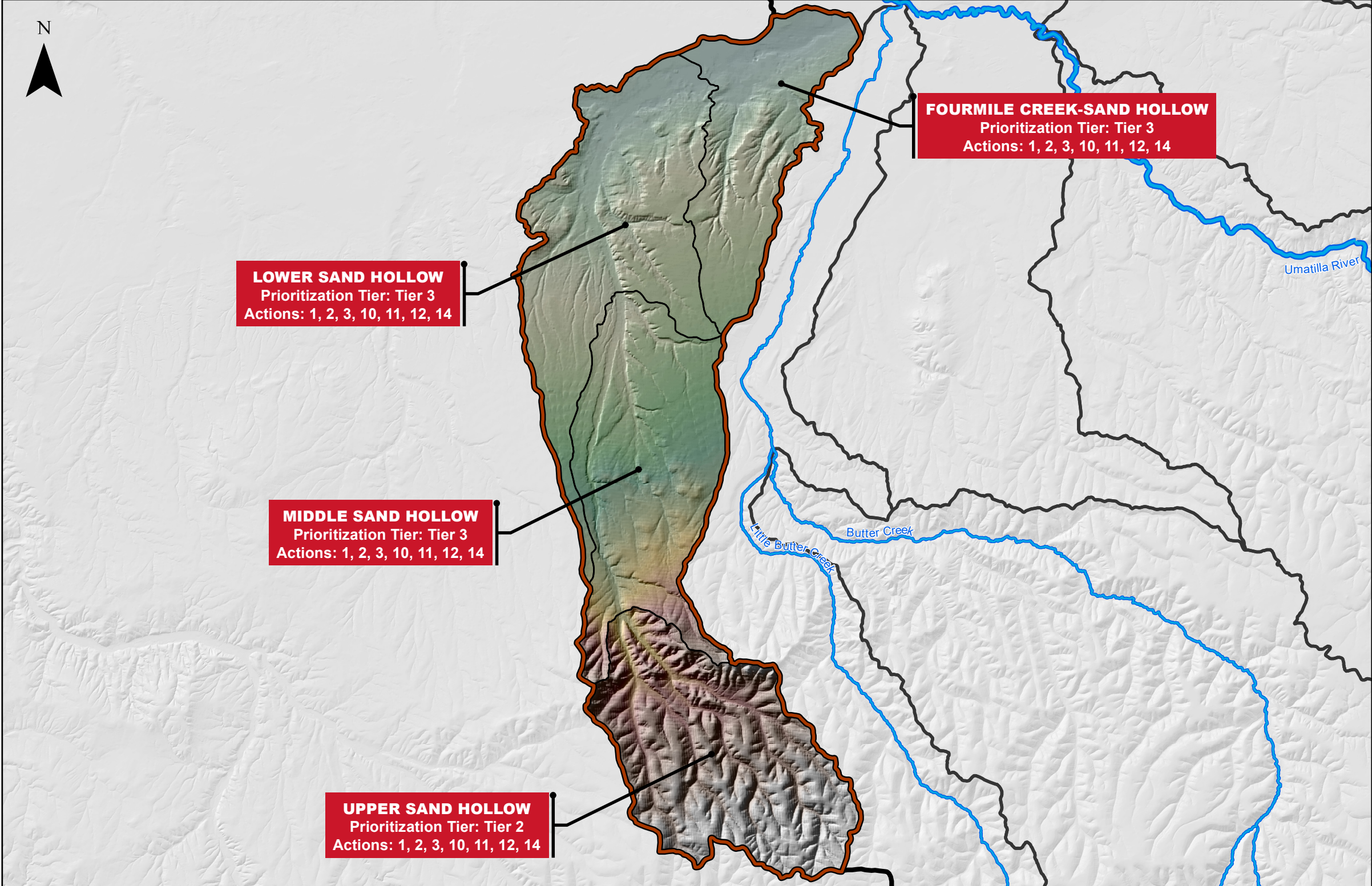




Watershed Opportunities

HUC10 Watershed Name:  
Sand Hollow Watershed

- All Potential Restoration Actions:
- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
  - (2) Land Management: (Grazing Plans, Fire management, etc.)
  - (3) Reduce - Mitigate Point or Non-Point Source Impacts
  - (4) Nutrients Additions (carcasses)
  - (5) Upland Vegetation Treatment - Management
  - (6) Road Grading - Drainage Improvements
  - (7) Road Decommissioning or Abandonment
  - (8) Water Management-Improve Irrigation Efficiency
  - (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
  - (10) Remove Non-native Plants
  - (11) Off--Site Water Developments
  - (12) Riparian Buffer Strip, Planting
  - (13) Selective Thinning
  - (14) Beaver Re-introduction or Management
  - (15) Riparian Fencing



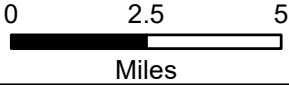
Legend

- 2020 Umatilla River Centerline
- HUC8 Major Streams
- Umatilla Subbasin
- HUC10 Watersheds
- HUC12 Subwatersheds
- Watershed in focus

Elevation (in feet)  
High : 3500  
Low : 500

Umatilla River Assessment  
Subbasin Uplands Map Book

Sand Hollow Watershed  
Restoration Actions



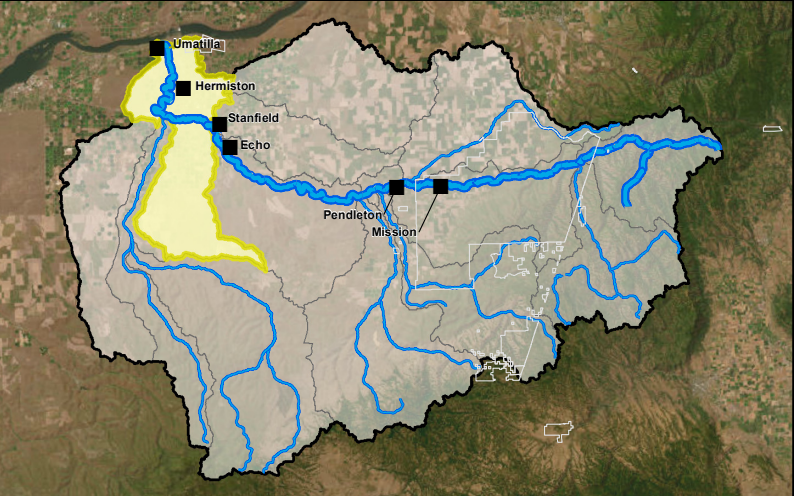
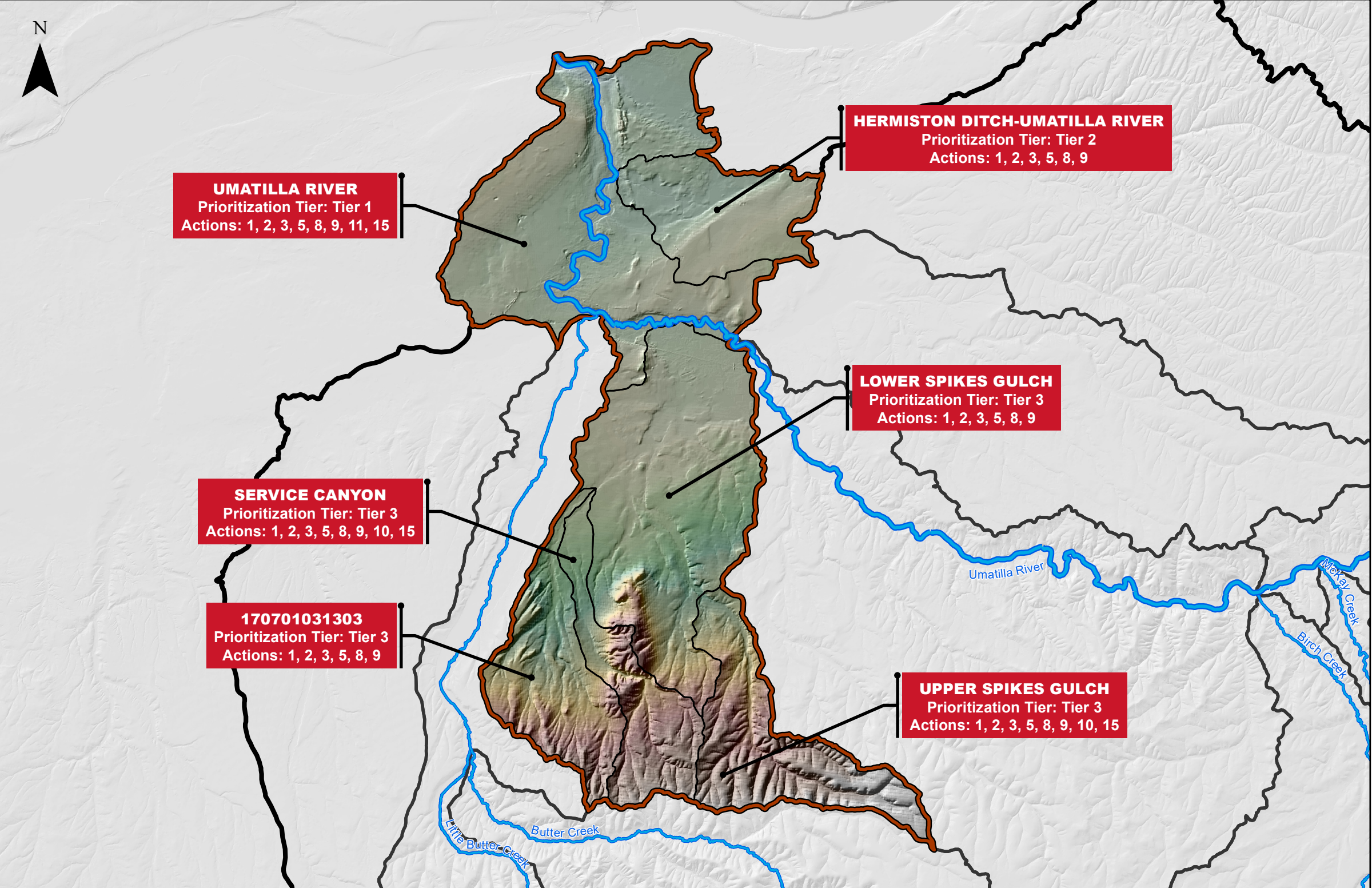


Watershed Opportunities

HUC10 Watershed Name:  
Hunt Ditch-Umatilla River Watershed

All Potential Restoration Actions:

- (1) Protection: (Acquisitions, Easements, Coop. Agreements)
- (2) Land Management: (Grazing Plans, Fire management, etc.)
- (3) Reduce - Mitigate Point or Non-Point Source Impacts
- (4) Nutrients Additions (carcasses)
- (5) Upland Vegetation Treatment - Management
- (6) Road Grading - Drainage Improvements
- (7) Road Decommissioning or Abandonment
- (8) Water Management-Improve Irrigation Efficiency
- (9) Acquire or Increase Instream Flow (Lease/Purchase; GW Storage)
- (10) Remove Non-native Plants
- (11) Off--Site Water Developments
- (12) Riparian Buffer Strip, Planting
- (13) Selective Thinning
- (14) Beaver Re-introduction or Management
- (15) Riparian Fencing



**Legend**

- 2020 Umatilla River Centerline
- HUC8 Major Streams
- Umatilla Subbasin
- HUC10 Watersheds
- HUC12 Subwatersheds
- Watershed in focus

**Elevation (in feet)**

High : 2750

Low : 250

**Umatilla River Assessment Subbasin Uplands Map Book**

Hunt Ditch-Umatilla River Watershed  
Restoration Actions

0 2.5 5  
Miles

**TETRA TECH**