Lotic Checklist

Name of Riparian-Wetland Area: Beaverdam Creek

Date: 10/15/04 Segment/Reach ID: Beaverdam Creek

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Larry Bright, Mike Lunn, Harry Stengel

Potential:A complex system, ranging from E channels, to interrupted and underground flows. Upper part is heavy to sedge communities with a few willows, more willow/sedge communities mid-reach including some aspen, then sedges in area above confluence with S. fork.

Yes	No	N/A	HYDROLOGICAL
liner			1) Floodplain above bankfull is inundated in "relatively frequent" events Liner – ***In good places a yes, but there are a number of headcuts with small narrow incised channels. Even in these, probably gets out in most bankfull events.***
		X	2) Where beaver dams are present are they active and stable
liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) ***Upper area very good, but the incised areas in lower part of reaches causes a liner***
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
liner			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows. ***Yes along most areas except where incised below effective rooting depth of hydrophytic plants.*** (*enough*)
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy *Mostly yes*
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable *Most of the area is so well vegetated that the small headcuts will not run far. Lowest headcut above S. Fork has potential to run because of animal crossing.* (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

In the upper area, a small incision (<100 yards) from small headcut several decades old, good recovery below with willows growing in the entrenched area. Headcut at lower end, particularly above confluence with S. Fork has potential to run upvalley, 4-6 feet deep. This area needs to be repaired at area where horses, elk and livestock cross; this is particularly susceptible to degradation.

Road blading in this reach and others show that sidecasting is causing excessive sedimentation to stream channels.

Headcuts in lower end, particularly at confluence with South Fork, have potential to continue to degrade stream up valley. Lower area needs to be stabilized, particularly at the crossing used heavily by livestock, horses and elk.

SUMMARY DETERMINATION

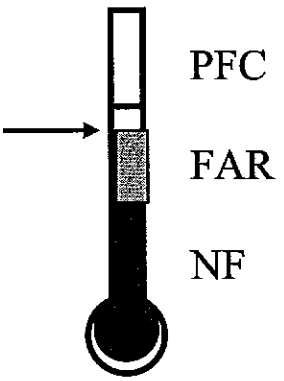
:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_X_ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X__

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Buck Creek

Date: October 16, 2004 Segment/Reach ID: Buck Creek

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Piper Stout, Mike Lunn

Potential:
Rosgen B4, Interrupted
Mixed Conifer Overstory, alder/snowberry

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region).
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*)
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy.
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Excellent channel, only one small area disturbed. Could use more large/coarse wood to move on to potential, and also increased shrubs.

SUMMARY DETERMINATION

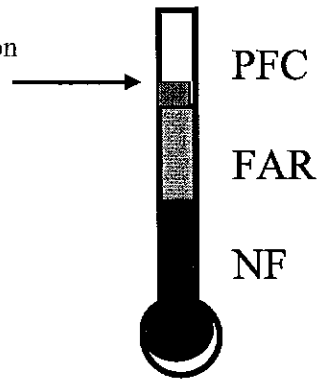
:

_X_ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Corral Creek

Date: October 17, 2004 Segment/Reach ID: Reach 1 (only)

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Mike Lunn

Potential: Rosgen C4/E4
Alder/red ozier dogwood/snowberry – willow in lower end

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) *Too wide and shallow*
Liner			4) Riparian-wetland area is widening or has achieved potential extent *Liner- places is widening, in some places just beginning to in last few years*
X			5) Upland watershed is not contributing to riparian-wetland degradation *Roads all over, but no indication of excess sediments in channel. Would be good to rehabilitate and close some roads.*

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
Liner			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*) *Liner – definite yes in lower end, liner above with weakly developed plant communities. Moving in right direction.*
Liner			10) Riparian-wetland plants exhibit high vigor *X – strong yes on woody plants throughout reach* *x – Liner for herbaceous, weak in upper end, variable throughout*
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) *Especially lacking in upper end, good in lower end.*
Liner			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) *Liner – In places there is plenty, but not throughout. Large/coarse wood is important*

Yes	No	N/A	EROSION DEPOSITION
Liner			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy *Liner – Large wood lacking in stretches, presence of large wood greatly enhances stabilizing vegetation.*
Liner			14) Point bars are revegetating with riparian-wetland vegetation *Grades from very little at upper end to very good at lower end of reach*
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Drainage is excessively roaded, channel was probably severely modified by early logging. Rock and residual large wood probably kept channel from totally degrading. Should be more sedges/rushes becoming established in open areas, but woodies and large wood are the primary functionality keys.

SUMMARY DETERMINATION

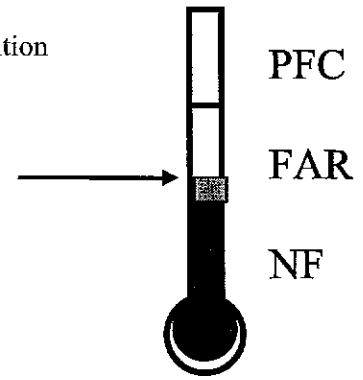
:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_X_ Upward – *early stages*
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X__

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Deer Creek

Date: October 16, 2004 Segment/Reach ID: Reach 1 – confluence of Buck Creek down

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Piper Stout, Mike Lunn

Potential:
Rosgen C4 (Lower 200 yards B3 or 4) – Log weir structures limit potential recovery
Mixed conifer overstory, Alder/snowberry plant community

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region). *Altered by log weir structures, confined by road. Sinuosity and width/depth ratio would improve with modification or removal of weirs.*
X			4) Riparian-wetland area is widening or has achieved potential extent
	liner		5) Upland watershed is not contributing to riparian-wetland degradation *Liner – Depositional areas reworking, may be caused by numerous roads up many of the creeks.*

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
	liner		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) *Liner – some meanders and even straight sections lack adequate stabilizing vegetation or wood. Structures add to scoured banks.*
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy. *In places, more wood along straight stretches would help if incorporated with willow and alder. Structures are maintaining wider and shallower conditions than desired for complexity.*
X			14) Point bars are revegetating with riparian-wetland vegetation *Lower section has no point bars*
X			15) Lateral stream movement is associated with natural sinuosity *Except where potential has changed to a new capability due to log structures.*
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) *Some active deposition areas.*

Remarks

So long as the structures remain in place, the stream will have a lowered ability to improve its channel characteristics.
Continuous and recent wild horse use is evident throughout much of reach (cows came out on 8/1/2004).
Riparian vegetation, particularly alders and willow in an upward trend in all age classes.
Near natural recovery cannot be attained due to log structures, roads, and channelization for log landings in the past.

SUMMARY DETERMINATION

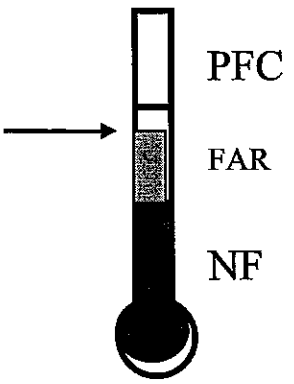
Functional Rating:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_ _ Upward
___ Downward
_X_ Not Apparent (Due to structures and roads)

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Deer Creek

Date: October 16, 2004 Segment/Reach ID: Reach 2 – confluence with S. Fork to Thorpe Ck

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Mike Lunn, Brian Hoefling, Piper Stout

Potential: Rosgen C4 channel
Mixed conifer/alder with willow-sedge/rush complexes in more open areas

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
Liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region). ***Liner – wider than it should be but narrowing.***
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation *Some gravel material coming in from improper road grading.*

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) *For both woody species and herbaceous.*
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*) *See Wayne's notes*
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*) *Just below camera point, stabilizing community types not as well developed, but this comprises much less than 1% of the total reach. See Winward 2000*
X			10) Riparian-wetland plants exhibit high vigor
Liner			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) ***In places where there is good presence of large wood, "yes", but in areas short of wood, "no"***
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
Liner			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy. ***Liner - Some parts of the reach lack adequate amounts of large wood, also need more large alders. Overall, more wood in stream would accelerate flood plain development.***
X			14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

First year of changed management, excellent end-of-year stubble and condition.
Good reach/area for large wood projects to accelerate recovery.
Current management not retarding attainment of RMO's.

SUMMARY DETERMINATION

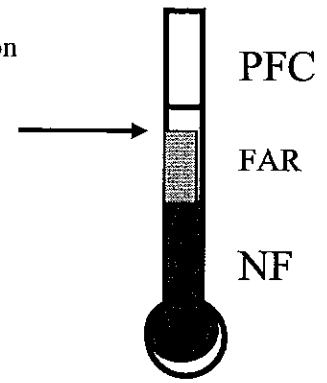
:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_X_ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Murderers Creek

Date: October 17, 2004 Segment/Reach ID: Reach 1

ID Team Observers: Wayne Elmore, Steve Leonard, Mike Lunn, Tom Friedrichsen, Brian Hoefling, Harry Stangel

Potential:
Rosgen "C4" with inclusions of B3 and C3.
Mixed conifer/Alder/red ozier dogwood/willow/snowberry

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
Liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region). ***Liner – Structures prevent stream from narrowing to potential with current number and configuration. Good elsewhere.***
X			4) Riparian-wetland area is widening or has achieved potential extent
Liner			5) Upland watershed is not contributing to riparian-wetland degradation ***Steepened point bars indicating more sediment than stream can effectively process, source unknown.***

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*)
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy.
Liner			14) Point bars are revegetating with riparian-wetland vegetation ***Liner – most are, but heavy deposition areas appear to dry out too fast to establish desirable plants, allowing gravel to continue moving in high flows.***
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
Liner			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) ***Liner – somewhat more sediment than can be processed, but not likely to have serious effects even in high flows due to good vegetation and wood.***

Remarks

Vegetation community very good, near potential, but channel characteristics are less than potential. Bedload will need to stabilize over time to achieve potential. Even in a moderately high event now however, only short sections would be impacted. There is little to no evidence that current sediment loads are eroding banks.
On B inclusions, vegetative composition is well over needed community type (Winward 5).
On C channels, which is most of reach, vegetation exceeds needed bank cover for PFC (Winward 3).

Culvert at lower end of reach on private land (Forest Service road) is blocked, and likely to blow out in next high flow event. There are plans to replace it, but it may not hold until next spring depending on flows.

SUMMARY DETERMINATION

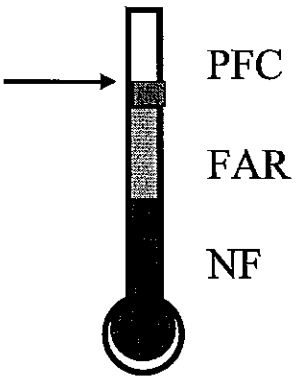
:

_X_ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: Murderers Creek – Reach 2 (holding pasture)

Date: 10/21/2004 Segment/Reach ID: Reach 2

ID Team Observers: Tom Friedrichsen, Brian Hoefling

Potential: Riparian-Wetland Vegetation – Alder/willow/sedge/rush community

Potential Channel Characteristics: Rosgen = E4 Stream Type, with inclusions of C4. Gradient approx 0.5%

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
liner			2) Where beaver dams are present are they active and stable **Observed 3 new small beaver dams; which would need to be enlarged and maintained to continue to be active and stable.**
liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) **Very sinuous with width/depth ratios a little higher than expected; however narrow/deep sections were observed.**
X			4) Riparian-wetland area is widening or has achieved potential extent **Riparian area is still widening as channel continues to narrow and point bars are revegetating.**
X			5) Upland watershed is not contributing to riparian-wetland degradation – **Did observe 6 small mid-channel bars; unknown source. Few other mid-channel bars formed due to LWD and/or alder. Also observed mid-channel bar in small exclosure associated with the Guard Station.**

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) **Alder is exhibiting all age classes; however willow were represented by seedlings and young plants.**
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) *(species present)* **Nine herbaceous stabilizers and seven shrub stabilizers exhibited dominance. Two colonizers were also noted. See species listing.**
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics **See #7 above.**
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events *(community types present)* **See #7 above.**
X			10) Riparian-wetland plants exhibit high vigor **Both herbaceous and shrub stabilizers exhibit very high vigor.**
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows *(enough)* **Exceeds 80% of PNC for Group III (Winward 2000) for greenline with stabilizing species or community types (including rocks and logs)**
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) **Adequate recruitment is available**

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy – **Functioning floodplain with overflow channels. Observed 15 pieces of large wood with alder functioning as a catchment for smaller diameter classes.**
liner			14) Point bars are revegetating with riparian-wetland vegetation – **Point bars were observed in the following states: fully vegetated with an abundance of stabilizers, partially vegetated with early colonizers, and relatively unvegetated.**
X			15) Lateral stream movement is associated with natural sinuosity **Large wood and embedded large wood functioning to maintain natural sinuosity.**
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition) – **For the most part the stream channel is processing sediment with localized areas of deposition (mid-channel bars) with unknown source.**

Remarks

Current management is clearly providing the improvements in stream health/condition prescribed by direction, ongoing monitoring on the liner answers should be done to insure continuing upward trend.

Consider providing hardened crossing/watering areas for livestock to reduce travel by livestock along stream banks looking for places to drink and/or cross.

SUMMARY DETERMINATION

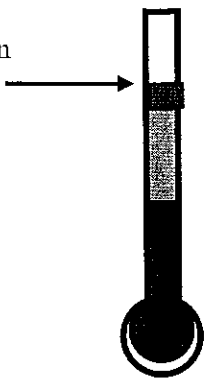
:

_X_ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



PFC

FAR

NF

Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Date: October 17, 2004 Segment/Reach ID: Reach 1a

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Mike Lunn

Potential:
Rosgen "E" channel
Mixed conifer woodland, alder, willow, red ozier dogwood. Sedge/rush in openings

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent *Road encroachment slightly limits potential, but riparian area is widening.*
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery) *Lots of young alder and willow – Monitoring for continuing growth, more older age classes*
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) *A few animal crossings lack adequate vegetation, contributing minor sediment. Few in number or scope.*
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Very short interrupted section in reach, no water, <100 yards.

SUMMARY DETERMINATION

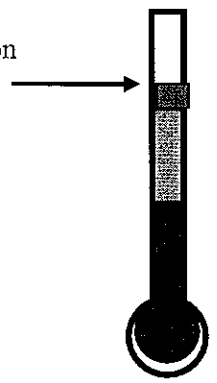
:

_X_ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



PFC

FAR

NF

Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: North Fork Deer Creek

Date: October 17, 2004 Segment/Reach ID: Reach 2 (Exclosure)

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Mike Lunn

Potential:
Rosgen "E" Channel
Sedge/rush with some willow patches – altered by check dams near center of reach

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) *Stream channel altered by checkdam, limits increase in sinuosity in that stretch.*
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*)
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity *Check dams modify sinuosity*
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Continue Present Management and monitoring.

SUMMARY DETERMINATION

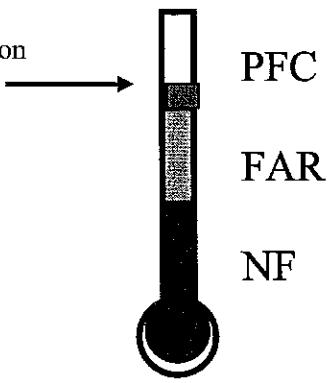
:

X__ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: North Fork Deer Creek

Date: October 17, 2004 Segment/Reach ID: Reach 3 (exclosure to confluence with S. Fork

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Mike Lunn,

Potential:
Rosgen "E"
Mixed conifer with willow/alder – lower 350 yards sedge-rush with willow

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
Liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) ***Liner – width/depth ratio out in few places, too wide and shallow. Potential to cut off some meanders.***
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*) *Community types well developed in many places, but in other areas progressing towards good development.*
X			10) Riparian-wetland plants exhibit high vigor
	X		11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) ***Large wood needed to accelerate establishment and density of desirable vegetation by forming more protected spots.***
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) ***Adequate source available, but need more in/along channel.***

Yes	No	N/A	EROSION DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy. ***Needs more large wood, flood plain still widening in places.***
Liner			14) Point bars are revegetating with riparian-wetland vegetation ***Liner – stream is moving towards an "E" channel, but existing point bars in "C" stretches not all fully vegetated.***
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*) ***Stream appears to have downcut about 100 years ago, recovering well but a long way from potential.***
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Lower 350 yards is an inclusion of sedge-rush/willow, and is at PFC. Better (and different type) than overall reach.

SUMMARY DETERMINATION

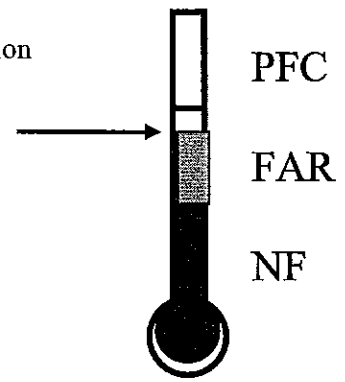
:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_X_ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: North Fork Deer Creek

Date: October 17, 2004 Segment/Reach ID: Reach 1 – upper meadow

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Brian Hoefling, Mike Lunn

Potential:
Rosgen "E"
Sedge/rush, willow patches

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*)
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

SUMMARY DETERMINATION

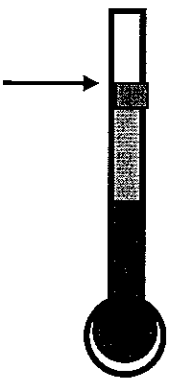
:

_X_ Proper Functioning Condition

___ Functional - At Risk

___ Nonfunctional

___ Unknown



PFC

FAR

NF

Trend for Functional - At Risk:

___ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: South Fork Murderers Creek

Date: 10/15/2004 Segment/Reach ID: Reach 1 – down to ODFW exclosure

ID Team Observers: Wayne Elmore, Steve Leonard, Larry Bright, Tom Friedrichsen, Mike Lunn, Harry Stangel, Chet Hettinga

Potential: *Gradient ½ 1% consolidated silts and sands. Potential natural community would be 98% bank cover in these meadow types. Sedge/rush with willow complex. Potential Rosgen E6 channel*

Yes	No	N/A	HYDROLOGICAL
Liner			1) Floodplain above bankfull is inundated in "relatively frequent" events *Yes where functioning, no where incised.*
		X	2) Where beaver dams are present are they active and stable
Liner			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) ***Where E channel exists, answer is yes;good sinuousity, but in gulleys the width/depth ratio is out of balance.***
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*) (See notes)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
Liner			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows- (*enough*) ***In incised areas, hydrophytic root zones above water, but still vigorous. Where we have newer flood plains in bottom, getting better. In remaining areas, very adequate. Stream has incised within meanders.***
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
Liner			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy. ***Channel characteristic issues, incised areas have bare soils below effective rooting depth.***
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable (*not downcutting*) *At least three small headcuts, likely initiated decades ago by logging, road construction, grazing. Healing below headcuts about as quickly as headcuts moving upstream through heavy vegetation.*
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

Normally we would not rate a stream with headcuts with upward trend. In this reach, excellent vegetative condition is holding it together and stream is healing rapidly below headcuts. Beaver might accelerate recovery of water table, if they would stay where needed, but may stress other areas of drainage if they moved out of desired area.

SUMMARY DETERMINATION

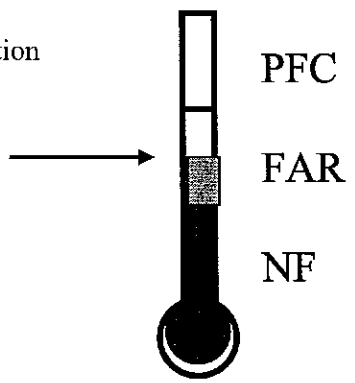
:

___ Proper Functioning Condition

X__ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

X__ Upward – *Some good, some bad, some in the middle – overall up because of vegetation*

___ Downward

___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___

No _X_

If yes, what are those factors?

___ Flow regulations

___ Mining activities

___ Upstream channel conditions

___ Channelization

___ Road encroachment

___ Oil field water discharge

___ Augmented flows

___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: South Fork Murderers Creek

Date: October 15, 2004 Segment/Reach ID: ODFW pasture, Reach 2

ID Team Observers: Wayne Elmore, Steve Leonard, Tom Friedrichsen, Mike Lunn, Larry Bright, Harry Stangel, Chet Hettinga

Potential: *Same as Reach 1 above, gradient less than ½ upper end, below cabin as valley narrows goes to 1-2%Rosgen E6 potential, part would be beaverdam complex at climax stages. Willow/sedge communities.*

Yes	No	N/A	HYDROLOGICAL
X			1) Floodplain above bankfull is inundated in "relatively frequent" events *a few very short sections of incised "G" channels*
		X	2) Where beaver dams are present are they active and stable
X			3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region)
X			4) Riparian-wetland area is widening or has achieved potential extent
X			5) Upland watershed is not contributing to riparian-wetland degradation

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*)
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*)
X			10) Riparian-wetland plants exhibit high vigor
X			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*)
		X	12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery)

Yes	No	N/A	EROSION DEPOSITION
X			13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy
		X	14) Point bars are revegetating with riparian-wetland vegetation
X			15) Lateral stream movement is associated with natural sinuosity
	X		16) System is vertically stable (*not downcutting*) *A 5-7 foot headcut near middle of reach threatens to run upstream through very old beaverdam.*
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

The headcut on far side of pasture needs to have fast remedial action. Currently, the area is being used by horses and wildlife and possibly livestock as a crossing area, and this accelerates headcut problem. Animals should be diverted from area by dragging trees or creating other barriers to using the spot to allow increased vegetation/root development. The incised area is recovering below, but under right environmental conditions the headcut could accelerate.

Because strong vegetative community exists above and below headcut, upward trend is applicable.

SUMMARY DETERMINATION

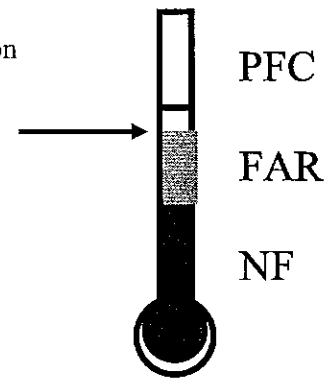
:

___ Proper Functioning Condition

_X Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

__X_ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X__

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)

Lotic Checklist

Name of Riparian-Wetland Area: South Fork Murderers Creek

Date: 10/15/04 Segment/Reach ID: Reach 3 – ODFW downstream to Rd 209

ID Team Observers: Wayne Elmore, Steve Leonard, Mike Lunn, Tom Friedrichsen, Larry Bright, Harry Stangel, Chet Hettinga

Potential: Rosgen C 4-5, willow/sedge community type, heavy to sedge. Climax wood be conifer woodland with willow, sedges and rushes in openings.

Yes	No	N/A	HYDROLOGICAL
Liner			1) Floodplain above bankfull is inundated in "relatively frequent" events **Rosgen G going towards C;yes where floodplain exists.**
		X	2) Where beaver dams are present are they active and stable
	X		3) Sinuosity, width/depth ratio, and gradient are in balance with the landscape setting (i.e., landform, geology, and bioclimatic region) – **Stream is too wide in places, needs continuing narrowing.**
X			4) Riparian-wetland area is widening or has achieved potential extent **Riparian area is widening inward, narrowing stream.**
X			5) Upland watershed is not contributing to riparian-wetland degradation **Appears to be road materials in creek from Sidecast blading/maintenance.**

Yes	No	N/A	VEGETATION
X			6) Diverse age-class distribution of riparian-wetland vegetation (recruitment for maintenance/recovery)
X			7) Diverse composition of riparian-wetland vegetation (for maintenance/recovery) (*species present*) **Reed canarygrass present, not desired. Canarygrass forms strong sod but has tendency to shear when water gets behind it.**
X			8) Species present indicate maintenance of riparian-wetland soil moisture characteristics
X			9) Streambank vegetation is comprised of those plants or plant communities that have root masses capable of withstanding high streamflow events (*community types present*) **Willow/reed canary grass in places, willows and sedges in remainder.**
X			10) Riparian-wetland plants exhibit high vigor
Liner			11) Adequate riparian-wetland vegetative cover present to protect banks and dissipate energy during high flows (*enough*) **Lower section has good willow/reed canarygrass, yes. But where dominated by canarygrass without willow, no.**
X			12) Plant communities are an adequate source of coarse and/or large woody material (for maintenance/recovery) **Need to make riparian area off-limits to firewood removal.**

Yes	No	N/A	EROSION DEPOSITION
	X		13) Floodplain and channel characteristics (i.e., rocks, overflow channels, coarse and/or large woody material) adequate to dissipate energy – **Large wood in the channel is not being replaced even though plenty is available for recruitment. More wood is needed. Also lacks adequate flood plain in places.**
Liner			14) Point bars are revegetating with riparian-wetland vegetation **Some point bars remain bare, some are revegetating with Reed canarygrass;others are doing well with right species.**
X			15) Lateral stream movement is associated with natural sinuosity
X			16) System is vertically stable (*not downcutting*)
X			17) Stream is in balance with the water and sediment being supplied by the watershed (i.e., no excessive erosion or deposition)

Remarks

More large wood is needed in the reach, may be opportunity for project work that would place wood with roots attached in key places to assist channel evolution. Recommendation however would be to continue to monitor stream as it recovers before making mechanical intervention. Clearly there should be restrictions on removing any wood in the riparian zone.

Presence of reed canarygrass will slow recovery in some places as by itself it lacks the strength to maintain channel characteristics, but there is little that can be done to reduce presence. It has been noted on Bear Creek in central Oregon that properly managed grazing seems to retard spread and dominance of reed canarygrass, but this is anecdotal (Elmore).

SUMMARY DETERMINATION

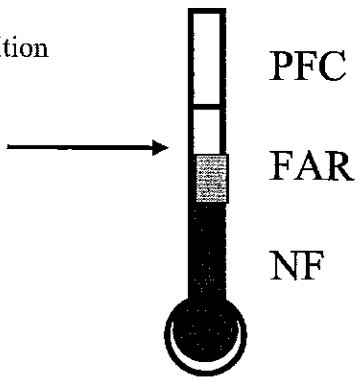
:

___ Proper Functioning Condition

_X_ Functional - At Risk

___ Nonfunctional

___ Unknown



Trend for Functional - At Risk:

_X_ Upward
___ Downward
___ Not Apparent

Are factors contributing to unacceptable conditions outside the control of the manager?

Yes ___
No _X_

If yes, what are those factors?

___ Flow regulations
___ Mining activities
___ Upstream channel conditions
___ Channelization
___ Road encroachment
___ Oil field water discharge
___ Augmented flows
___ Other (specify) _____

(Revised 1998) (7/12/04)