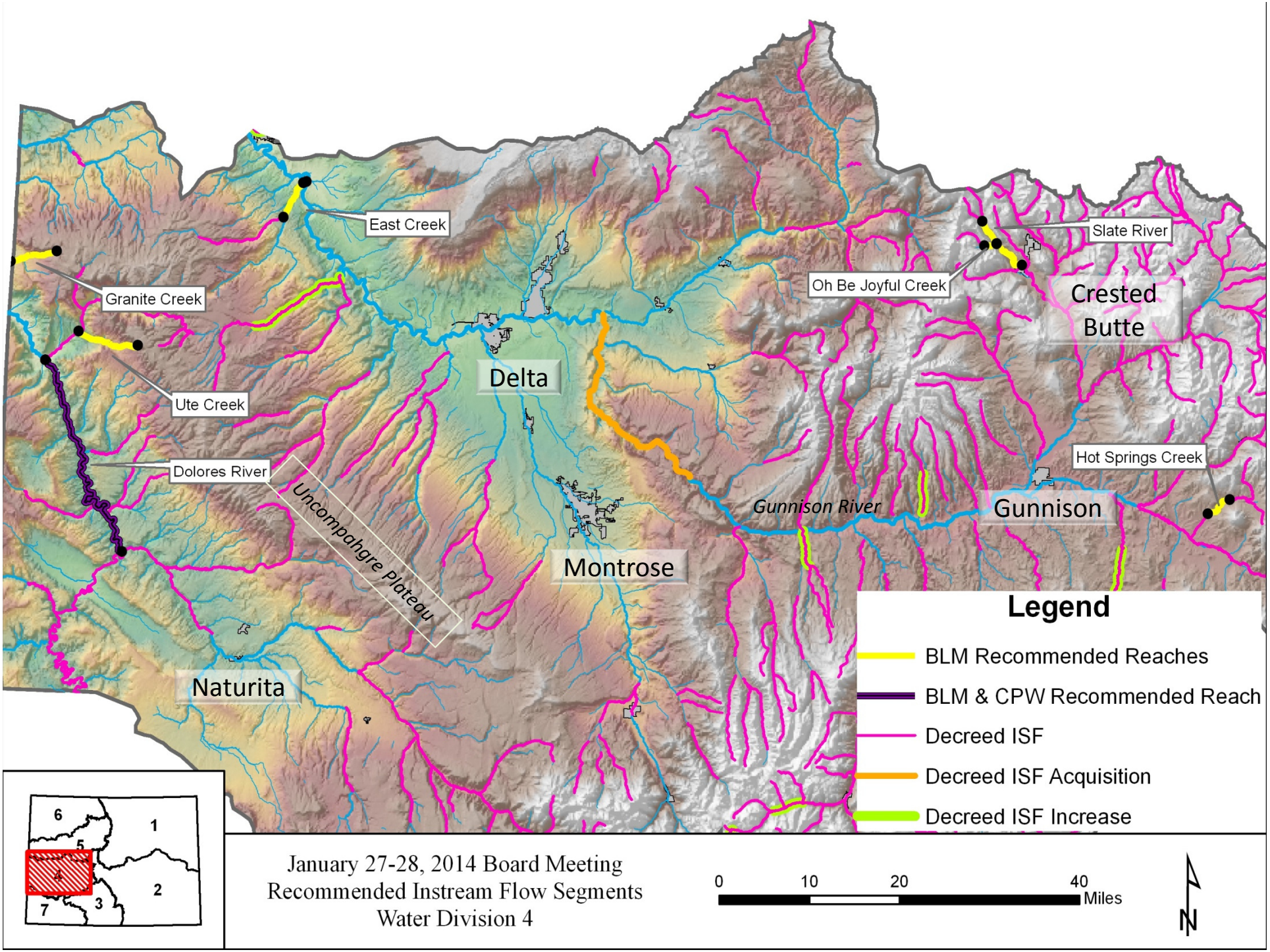

Agenda Item 29
2013 ISF New Appropriation Recommendations
18 new stream segments in Water Divisions 1, 4 and 5
Dolores River


East Creek
Granite Creek
Ute Creek
Dolores River
Uncompahgre Plateau
Naturita
Delta
Montrose
Gunnison River
Gunnison
Hot Springs Creek
Slate River
Oh Be Joyful Creek
Crested Butte
Legend
BLM Recommended Reaches
BLM & CPW Recommended Reach
Decreed ISF
Decreed ISF Acquisition
Decreed ISF Increase
6
1
5
4
2
7
3
January 27-28, 2014 Board Meeting
Recommended Instream Flow Segments
Water Division 4
0
10
20
40
Miles
N


Dolores River Map
~9 miles
Unaweep Canyon
West Creek
Gateway
Uncompahgre Plateau
Utah
Blue Creek
North Fork Mesa Creek
South Fork Mesa Creek
Roc Creek
Mesa Creek
Paradox Valley
San Miguel River
Uravan
© 2013 Google
4.55 mi
Imagery Date: 6/10/2013 38°29'33.42" N 108°50'08.00"

Staff Investigations

Provide technical analyses and information related to the required statutory findings so that the Board can declare its intent to appropriate and take final action on the recommendation.

Natural Environment
Water Availability
No Material Injury

Discharge Measurement Summary

Date Generated: Fri Sep 21 2012

File Information

File Name	GOVCRALT.001.WAD
Start Date and Time	2012/09/18 14:35:39

Site Details

Site Name	GOVERNMENT CR ABV LT
Operator(s)	BRIAN EPSTEIN

System Information

Sensor Type	FlowTracker
Serial #	P2354
CPU Firmware Version	3.9
Software Ver	2.30
Mounting Correction	0.0%

Units (English Units)

Distance	ft
Velocity	ft/s
Area	ft^2
Discharge	cfs

Discharge Uncertainty

Category	ISO	Stats
Accuracy	1.0%	1.0%
Depth	0.7%	1.7%
Velocity	2.2%	13.8%
Width	0.2%	0.2%
Method	3.5%	-
# Stations	5.8%	-
Overall	**7.2%**	**14.0%**

Summary

Averaging Int.	40	# Stations	9
Start Edge	REW	Total Width	4.200
Mean SNR	30.5 dB	Total Area	1.844
Mean Temp	56.44 °F	Mean Depth	0.439
Disch. Equation	Mid-Section	Mean Velocity	0.1039
		Total Discharge	**0.1915**

Measurement Results

St	Clock	Loc	Method	Depth	%Dep	MeasD	Vel	CorrFact	MeanV	Area	Flow	%Q
0	14:35	0.40	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0
1	14:35	1.00	0.6	0.290	0.6	0.116	0.0541	1.00	0.0541	0.160	0.0086	4.5
2	14:37	1.50	0.6	0.400	0.6	0.160	0.0958	1.00	0.0958	0.200	0.0192	10.0
3	14:43	2.00	0.6	0.480	0.6	0.192	0.0285	1.00	0.0285	0.240	0.0069	3.6
4	14:44	2.50	0.6	0.570	0.6	0.228	0.0390	1.00	0.0390	0.285	0.0111	5.8
5	14:47	3.00	0.6	0.650	0.6	0.260	0.1430	1.00	0.1430	0.325	0.0465	24.3
6	14:50	3.50	0.6	0.620	0.6	0.248	0.1358	1.00	0.1358	0.310	0.0421	22.0
7	*14:52*	*4.00*	*0.6*	*0.590*	*0.6*	*0.236*	*-0.1762*	*-1.00*	*0.1762*	*0.324*	*0.0572*	*29.8*
8	14:52	4.60	None	0.000	0.0	0.0	0.0000	1.00	0.0000	0.000	0.0000	0.0

Rows in italics indicate a QC warning. See the Quality Control page of this report for more information.

Natural Environment

There is a natural environment that can be preserved to a reasonable degree

Shell Creek
brook trout, macro invertebrates
healthy riparian community

Hot Springs Creek *(increase)*
brook trout, longnose dace, macro invertebrates, recovering riparian community

Speckled dace in spawning colors

Ute Creek

brook trout, macro invertebrates, robust riparian community

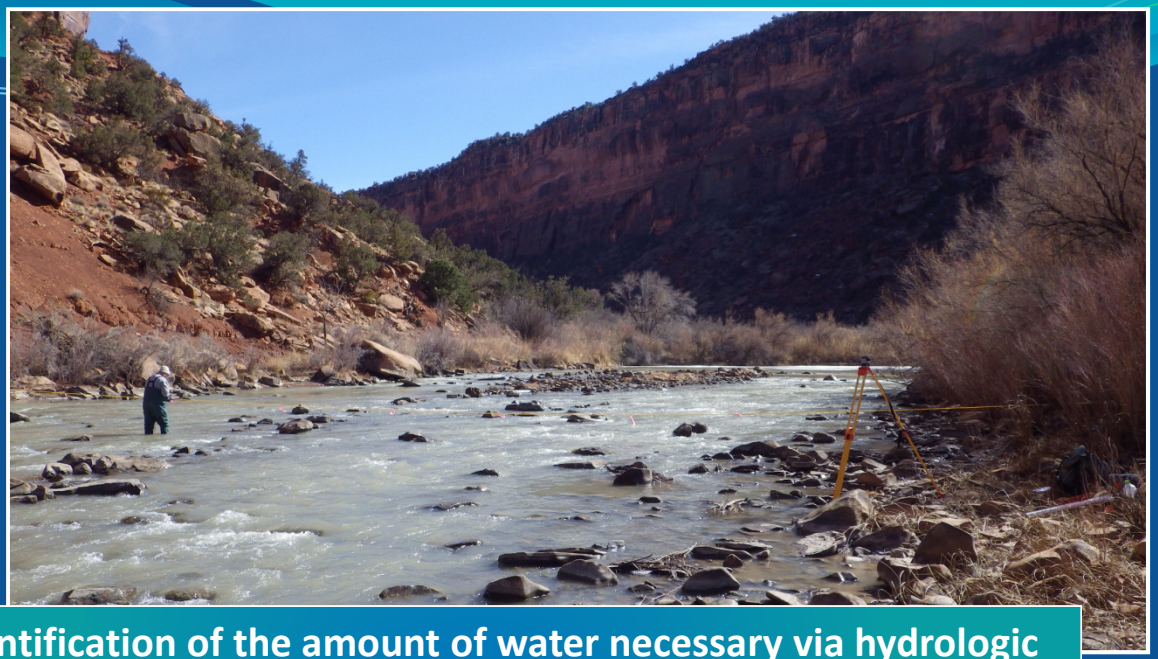
Bluehead Sucker in Spawning Colors

East Creek

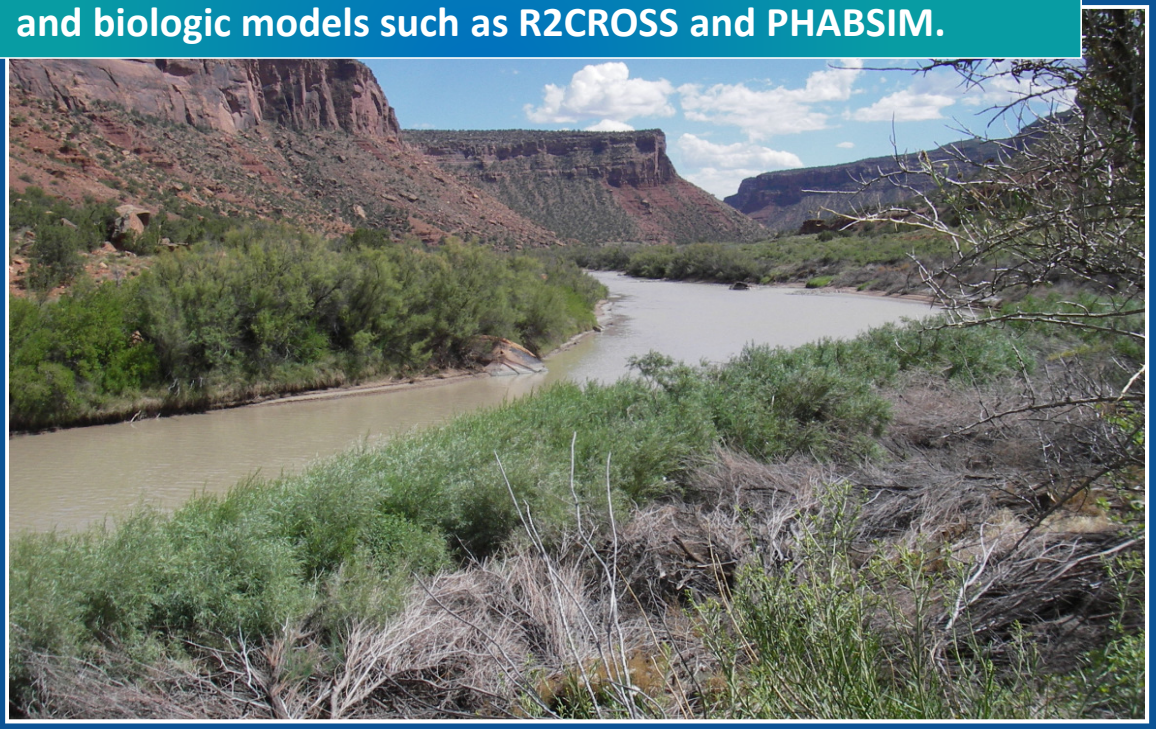
speckled dace – upper reach, flannelmouth, bluehead and white sucker – lower reach northern leopard frog, robust riparian community

Granite Creek

rainbow and brown trout, macro invertebrates, robust riparian community



Quantification of the amount of water necessary via hydrologic and biologic models such as R2CROSS and PHABSIM.



Dolores River

BLM sensitive species and CPW species of special concern - flannelmouth and bluehead sucker, roundtail chub
speckled dace

Native riparian vegetation recovering following tamarask removal

Special Stream Characteristics

Stream	Sensitive Fish Species or Species of Special Concern	Roundtable Identified Environmental Attributes
Granite Creek	None	Rare Plants and Significant Plant Communities
Ute Creek	None	Significant Plant Communities
Dolores River	bluehead & flannelmouth suckers, roundtail chub	None
East Divide Creek	Colorado river cutthroat trout	bluehead sucker, Colorado river cutthroat trout
Left Fork Carr Creek	Genetically pure native cutthroat trout	None
Beaver Creek	Colorado river cutthroat trout	Colorado river cutthroat trout; Important Riparian Habitat: Riparian/Wetland - Dependent Rare Plants, Significant Riparian/Wetland Plant Communities
Beaver Dams Creek	Colorado river cutthroat trout	None
West Divide Creek	Colorado river cutthroat trout , bluehead sucker	bluehead sucker, roundtail chub, flannelmouth sucker, Colorado river cutthroat trout

Water Availability

The natural environment will be preserved to a reasonable degree by the water available for the appropriation

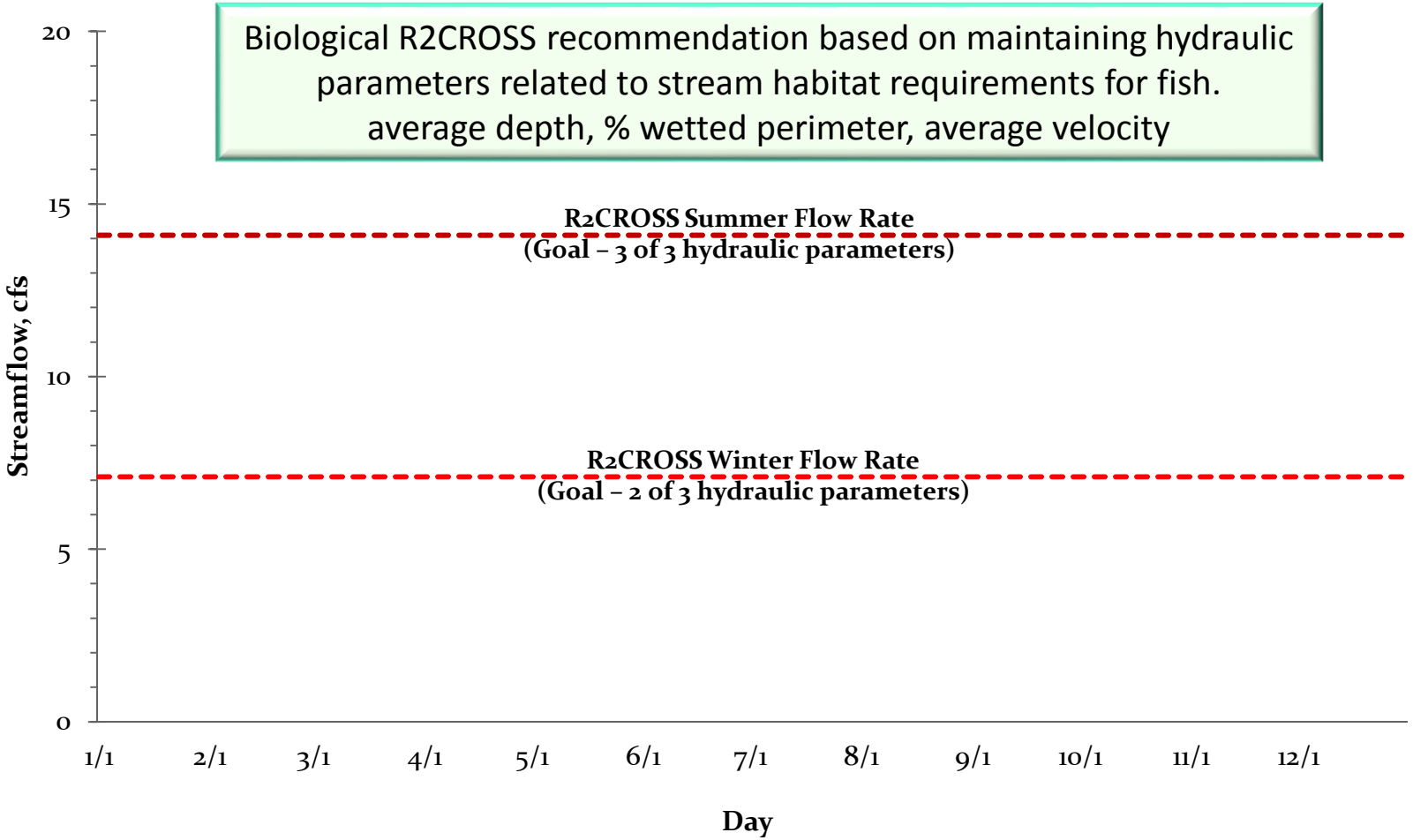
- Hydrologic analyses – driven by best available data and analysis methodology
  - ✓ Gage Records + 20 years, short term gages, temporary gages, spot flow measurements, diversion records.
  - ✓ Statistical analysis of data to provide median daily flow hydrograph when possible.
  - ✓ StreamStats analysis to provide mean monthly hydrograph when data is limited.
  - ✓ Detailed CDSS modeling on larger streams.
  - ✓ Anecdotal information from water commissioners, land owners, ditch or reservoir operators, resource managers.
- Water availability can be viewed as a necessary refinement that may impose limitations on biological quantification model findings.

Water Availability

West Divide Creek

Lower terminus: confluence with Mosquito Creek

Biological R2CROSS recommendation based on maintaining hydraulic parameters related to stream habitat requirements for fish. average depth, % wetted perimeter, average velocity



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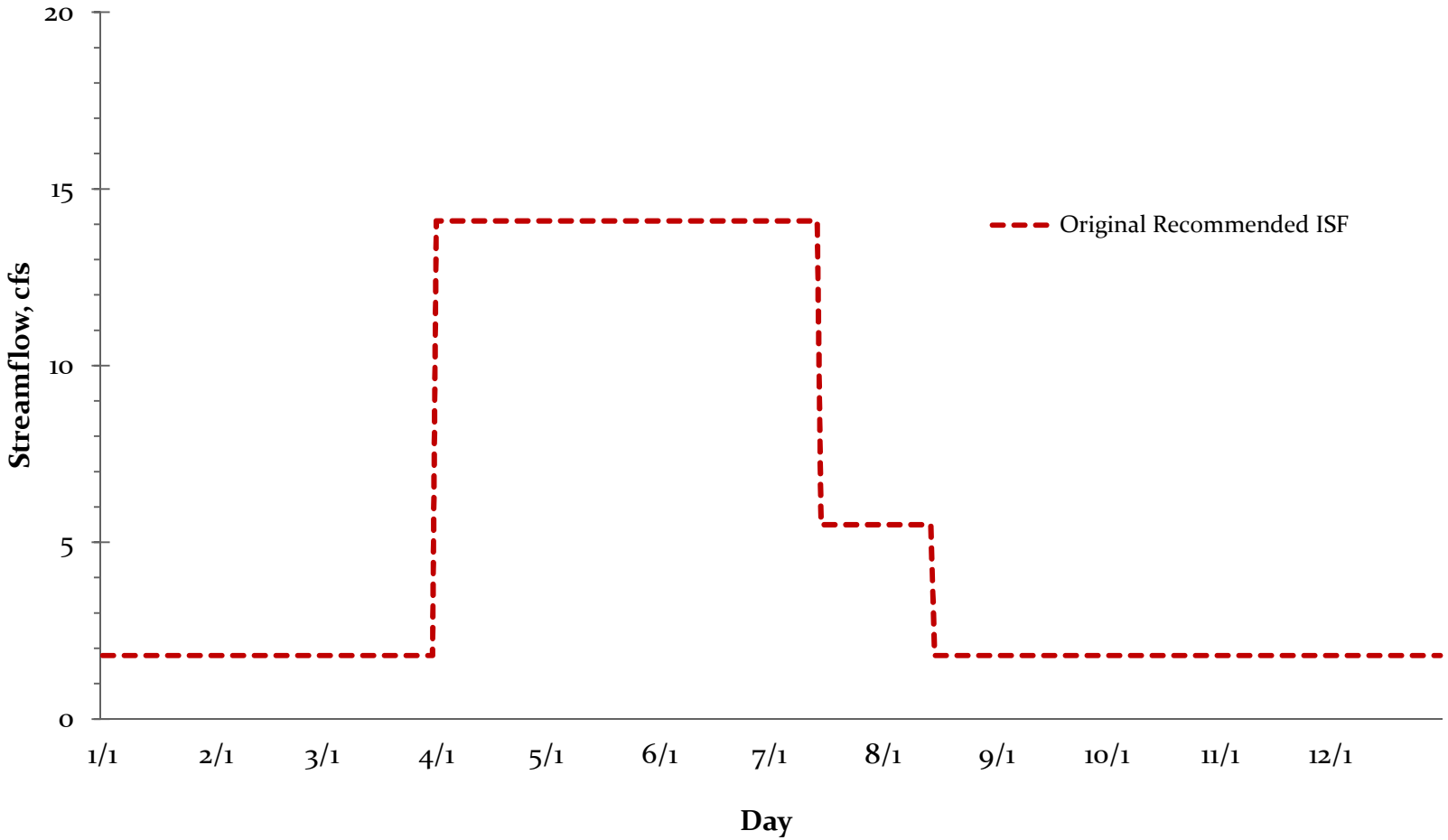

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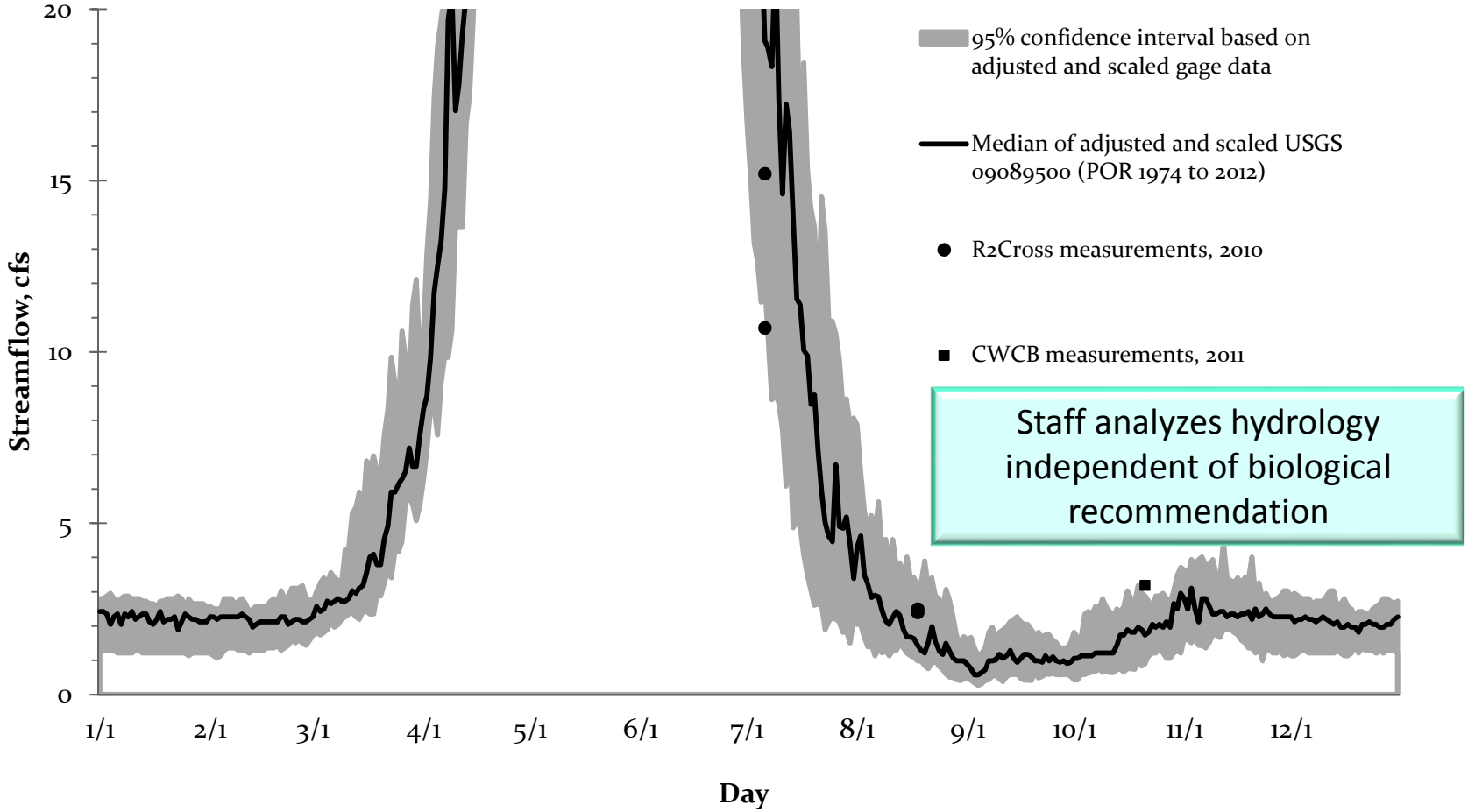

Staff analyzes hydrology independent of biological recommendation

Water Availability

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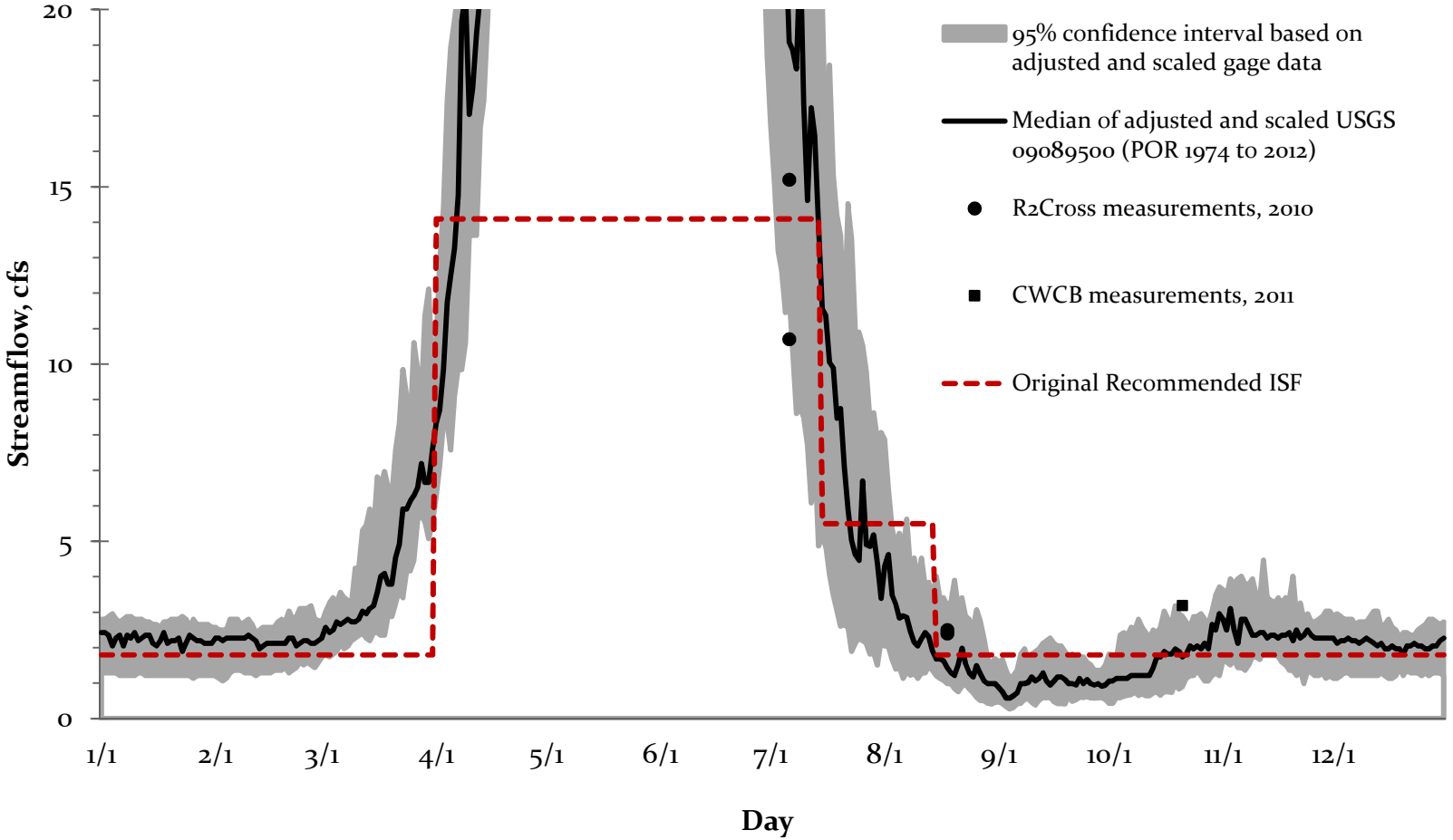

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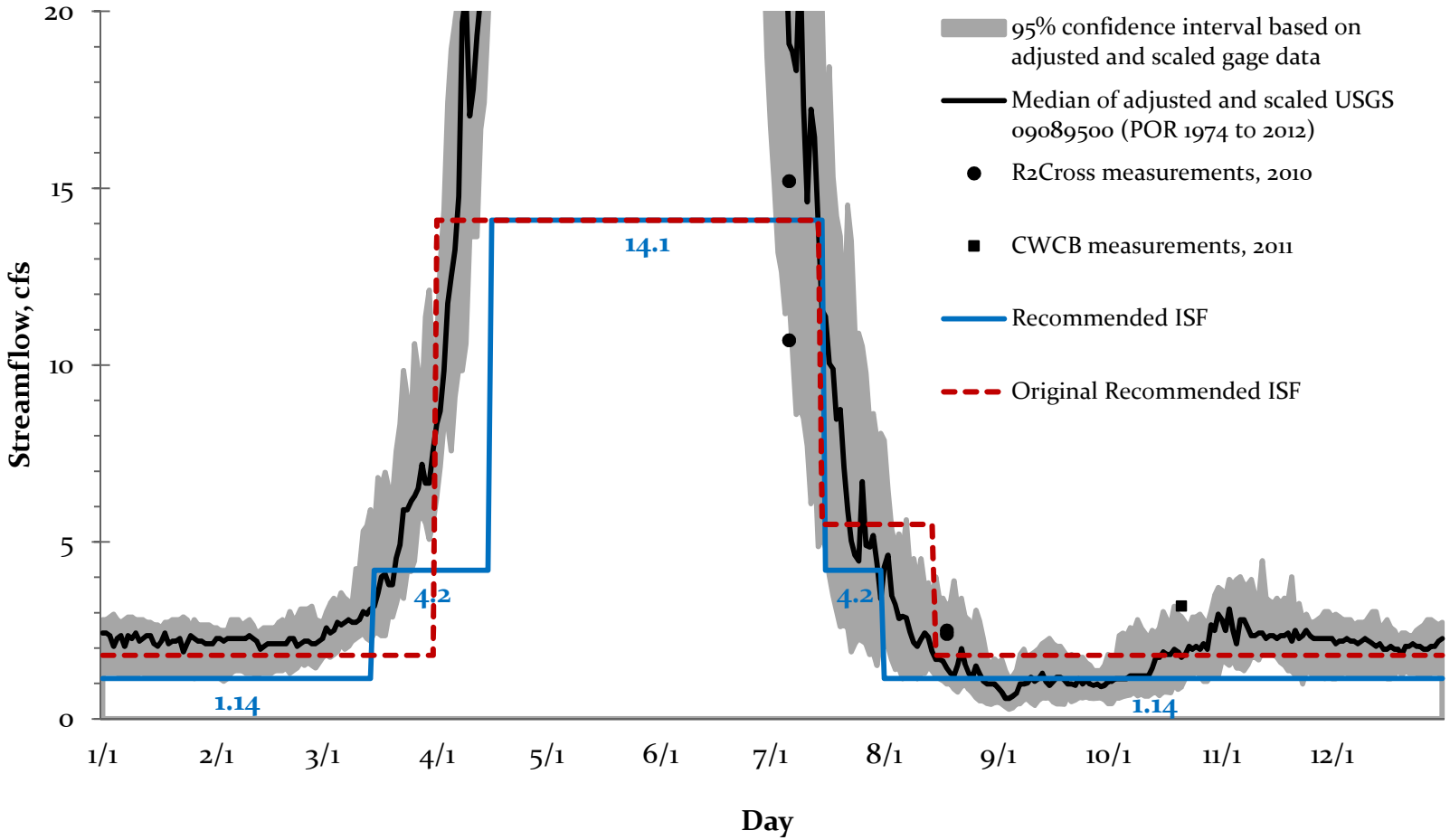

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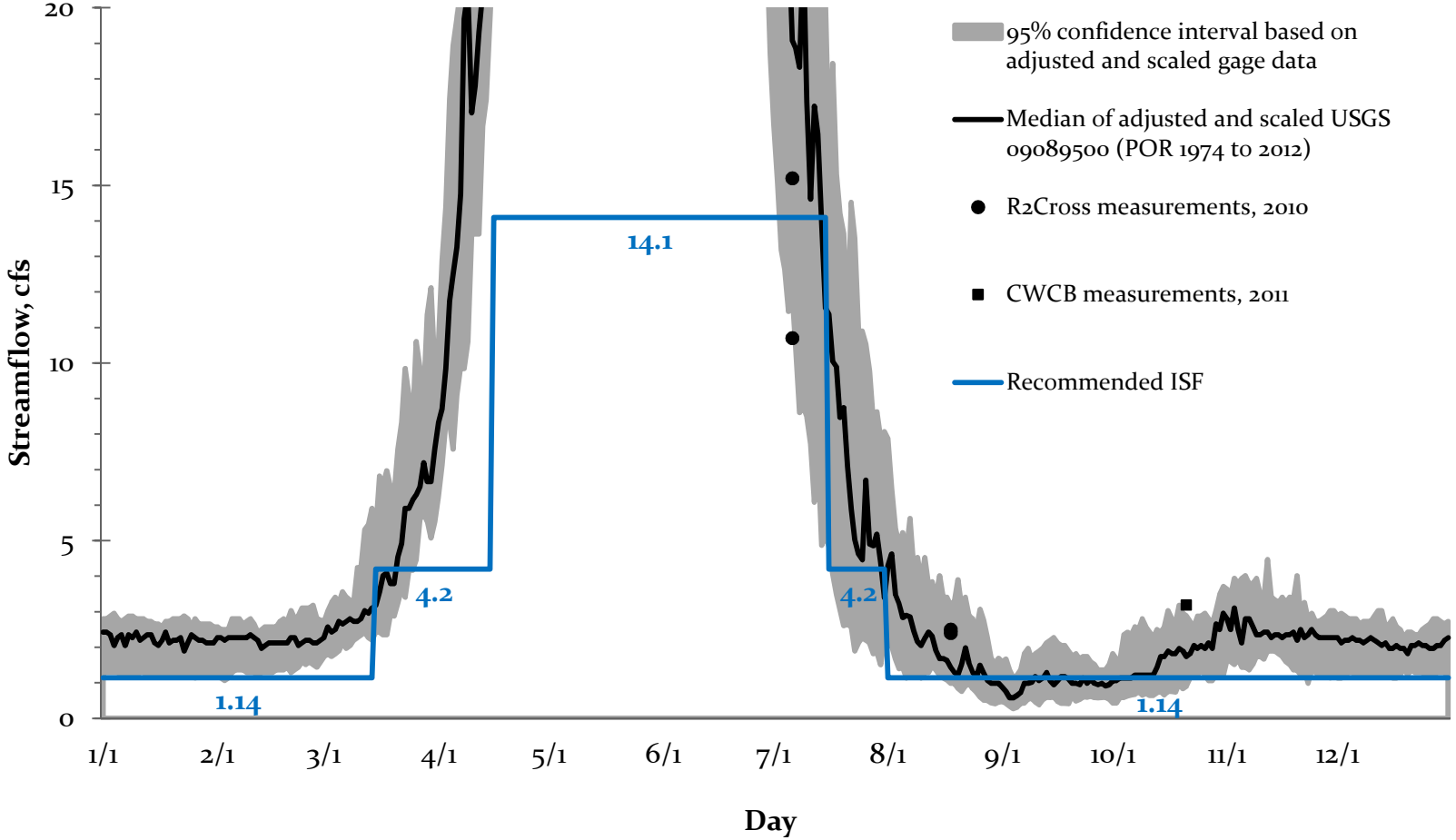
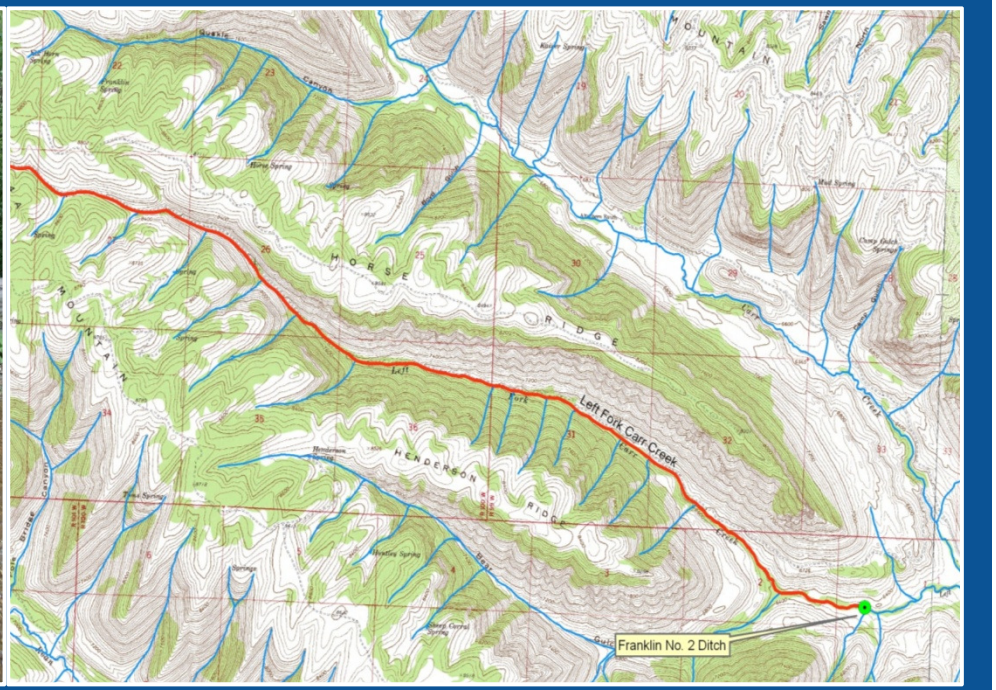


No Material Injury to Water Rights

The natural environment can exist without material injury to water rights

- Review tabulation of water rights and plot locations.
- Determine if any existing water rights create issues with water availability.
- When possible, identify any undecreed uses that should be recognized under 37-92-102(3) b, with local stakeholders.
- Discuss existing rights with water commissioners and division engineer.

Tom Scott – Irrigates out of Franklin No. 2 Ditch



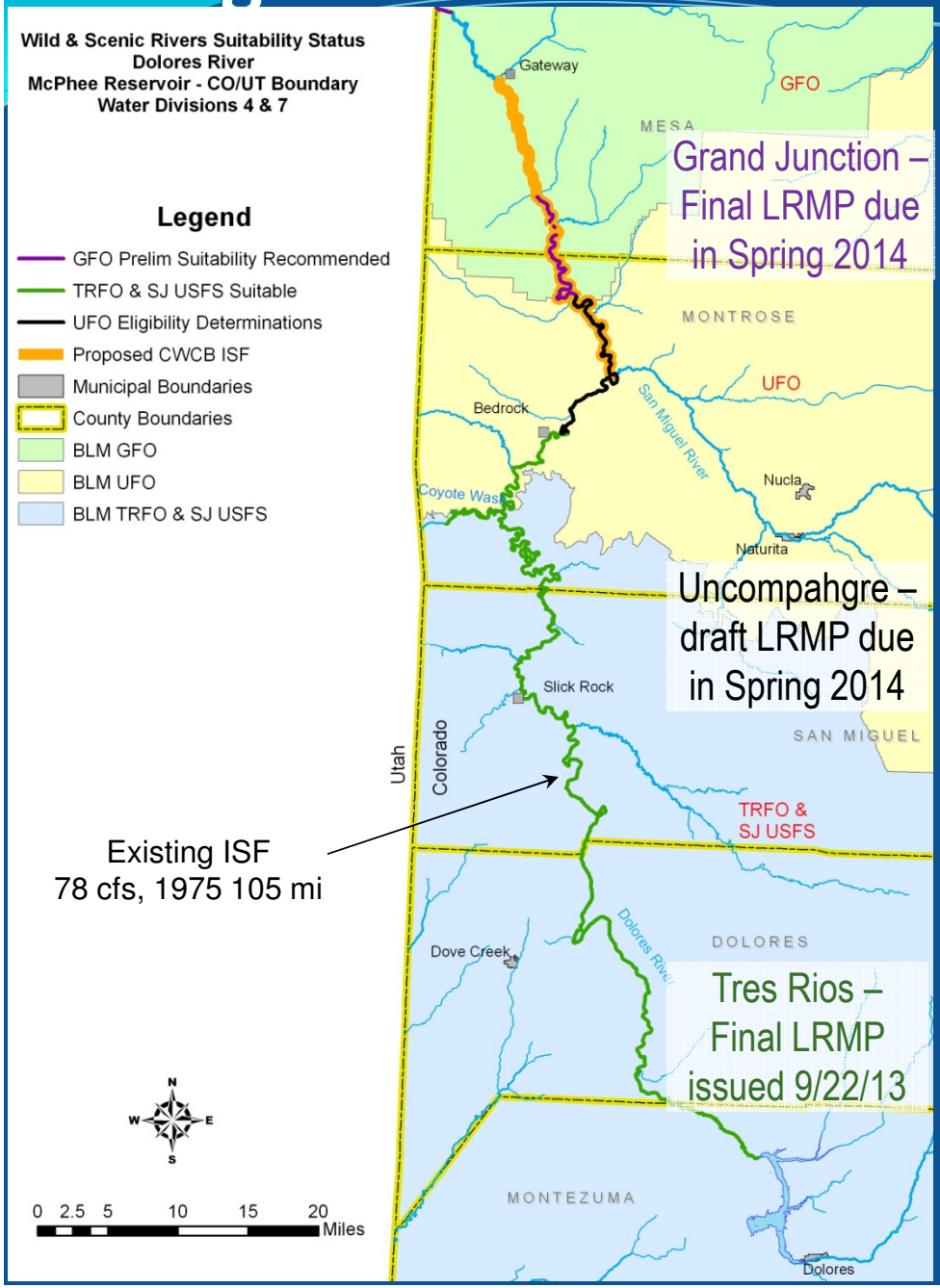
Stakeholder Coordination & Collaboration

Formal Notice and Meetings

- ISF Workshop
- Subscription Mailing Lists
- CWCB Board Meetings
- Staff Presentations
- Site Investigations with Stakeholders / DWR

Colorado River District
Crested Butte Land Trust
Division Engineers and Water Commissioners
Dolores Water Conservancy District
Garfield County
Gateway Canyon Resorts
Grand River Consulting representing West Divide Water Conservancy District
Gunnison County
High Country Citizens Alliance
Jesse Kruthaupt – Hot Springs Creek irrigator
Larimer County
Montrose, Mesa, Montezuma County
Protect the Flows – 30+ Business Owners
SanMiguel County
Southwest Basin Roundtable
Southwest Water Conservancy District
Taylor Haynes – Shell Creek land owner and irrigator
The High Lonesome Ranch – Scott Stewart
Tom Scott – Left Fork Carr Creek landowner and irrigator
Town of Rifle – Dick Deussen, Utilities Director
Trout Unlimited
Upper Gunnison River Basin – 24 Business Owners
Upper Gunnison Water Conservancy District
Western Resource Advocates

Background Information on ISF / WSR process



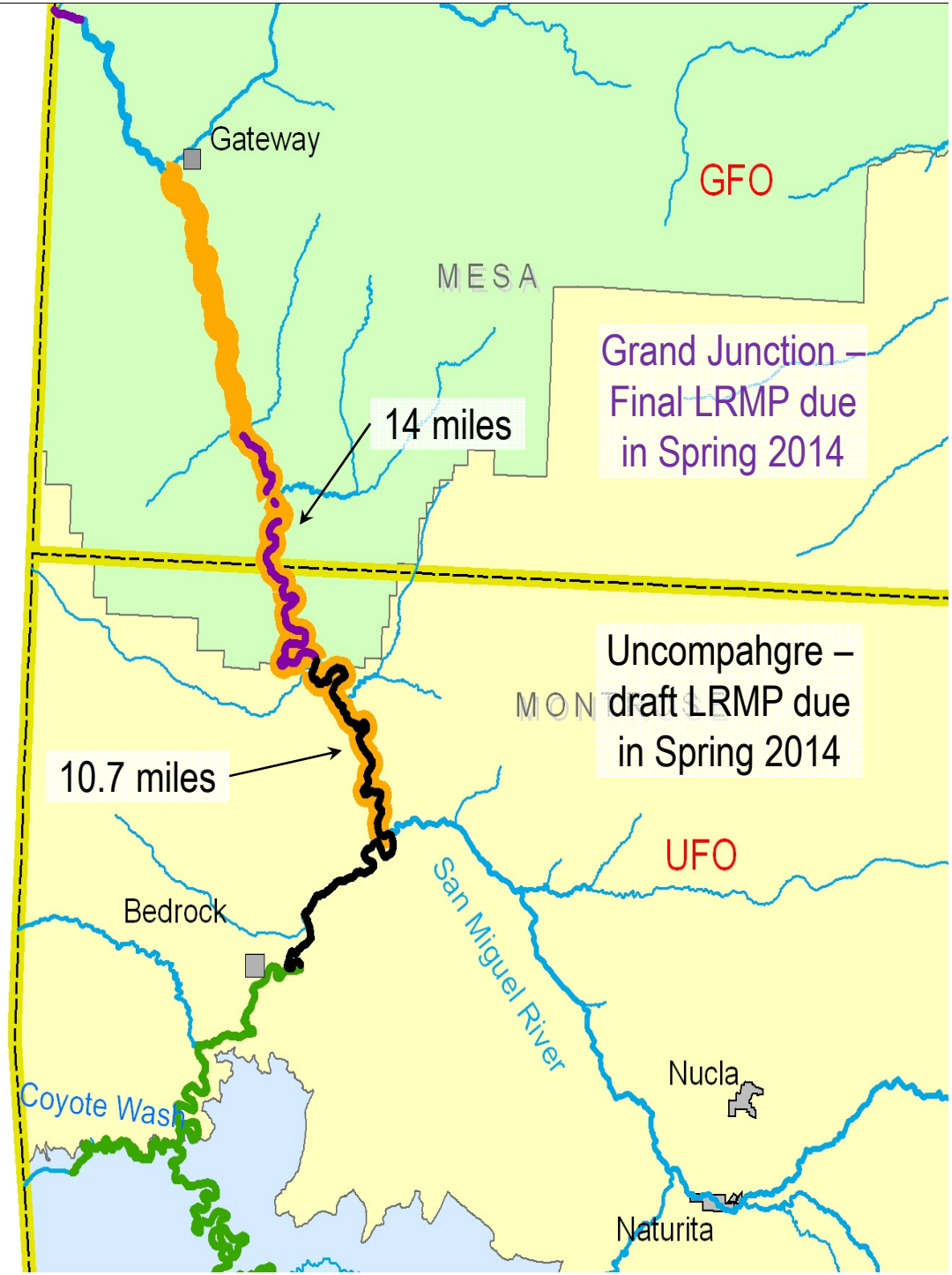
CWCB letter to BLM Grand Junction Field Office in May 2013:

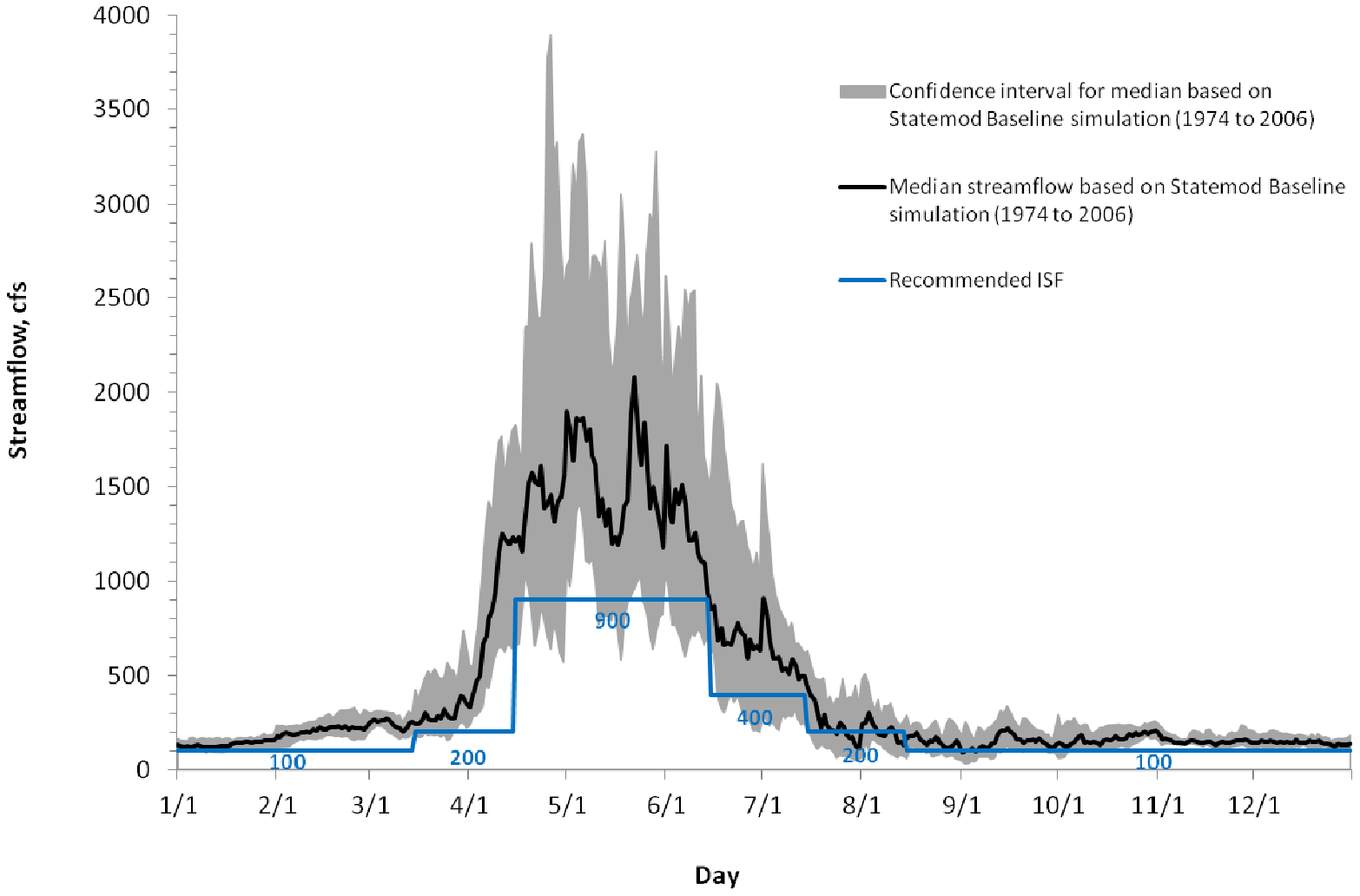
"The CWCB believes that a suitability determination for the subject Dolores River reaches is not the best method for protecting this portion of the Dolores River corridor. The CWCB believes that the existing and pending ISF water rights on the San Miguel and Dolores rivers will provide adequate protections for the stream-flow related values in the subject segments."

Wild & Scenic Rivers Suitability Status
Dolores River
McPhee Reservoir - CO/UT Boundary
Water Divisions 4 & 7

Legend

- GFO Prelim Suitability Recommended
- TRFO & SJ USFS Suitable
- UFO Eligibility Determinations
- Proposed CWCB ISF
- Municipal Boundaries
- County Boundaries
- BLM GFO
- BLM UFO
- BLM TRFO & SJ USFS




Dolores River
Lower terminus: confluence with West Creek
Streamflow, cfs
4000
3500
3000
2500
2000
1500
1000
500
0
1/1
2/1
3/1
4/1
5/1
6/1
7/1
8/1
9/1
10/1
11/1
12/1
Day
Confidence interval for median based on Statemod Baseline simulation (1974 to 2006)
Median streamflow based on Statemod Baseline simulation (1974 to 2006)
Recommended ISF
100
200
900
400
200
100

- Board declared its intent to appropriate ISF rights on the Dolores, January 2014
- Date for a notice to contest was March 31st, 2015.
- Hearing for the contested Dolores River appropriation will be held in conjunction with the Board's September 2015 Board Meeting.