

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 50.5

Butte Creek at Honey Run

September 06, 2006

Crew Names: R. Liebig, K. Jarrett, T. Lucas, N. Bauer



IMGP3861

Sept. 06, 2006

Caption: unit 2, pool habitat, looking towards river left.



IMG3862

Sept. 06, 2006

Caption: cobble and boulder substrate in unit one



IMGP3863

Sept. 06, 2006

Caption: unit 1, run habitat, looking upstream



IMGP3864

Sept. 06, 2006

Caption: unit 2, pool habitat, looking upstream.



IMGP3865

Sept. 06, 2006

Caption: unit 3, riffle habitat, looking upstream.



IMGP3866

Sept. 06, 2006

Caption: unit 3, riffle habitat, looking upstream.



IMGP3867

Sept. 06, 2006

Caption: unit 4, run habitat, looking upstream



IMGP3868

Sept. 06, 2006

Caption: unit 5, riffle habitat, looking upstream.



IMGP3869

Sept. 06, 2006

Caption: unit 5, riffle habitat, looking upstream.



IMGP3870

Sept. 06, 2006

Caption: unit 6, run habitat, looking upstream.

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 56.5

Butte Creek at Helldown

September 09, 2006

Crew Names: T. Lucas, K. Jarrett, N. Bauer, E. Gilliam



IMGP3920

Sept. 09, 2006

Caption: unit 1, run habitat, looking upstream.



IMGP3921

Sept. 09, 2006

Caption: unit 2, low gradient riffle, looking upstream.



IMGP3922

Sept. 09, 2006

Caption: unit 3, backwater pool, looking upstream.



IMGP3923

Sept. 09, 2006

Caption: unit 3, backwater pool, looking upstream.



IMGP3924

Sept. 09, 2006

Caption: unit 4, run habitat, looking upstream.



IMGP3925

Sept. 09, 2006

Caption: unit 5, low gradient riffle, looking upstream.



IMGP3926

Sept. 09, 2006

Caption: unit 6, lateral scour pool, looking upstream.



IMG3927

Sept. 09, 2006

Caption: unit 7, run habitat, looking upstream.



IMGP3928

Sept. 09, 2006

Caption: unit 8, riffle habitat, looking upstream.

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 60.8

Butte Creek at Quartz Bowl

September 19, 2006

Crew Names: R. Liebig, T. Lucas, N. Bauer



IMG0633

Sept. 19, 2006

Caption: bird nest on rock ledge.



IMGP0634

Sept. 19, 2006

Caption: rock ledge with bird nest from photo 633.



IMG0635

Sept. 19, 2006

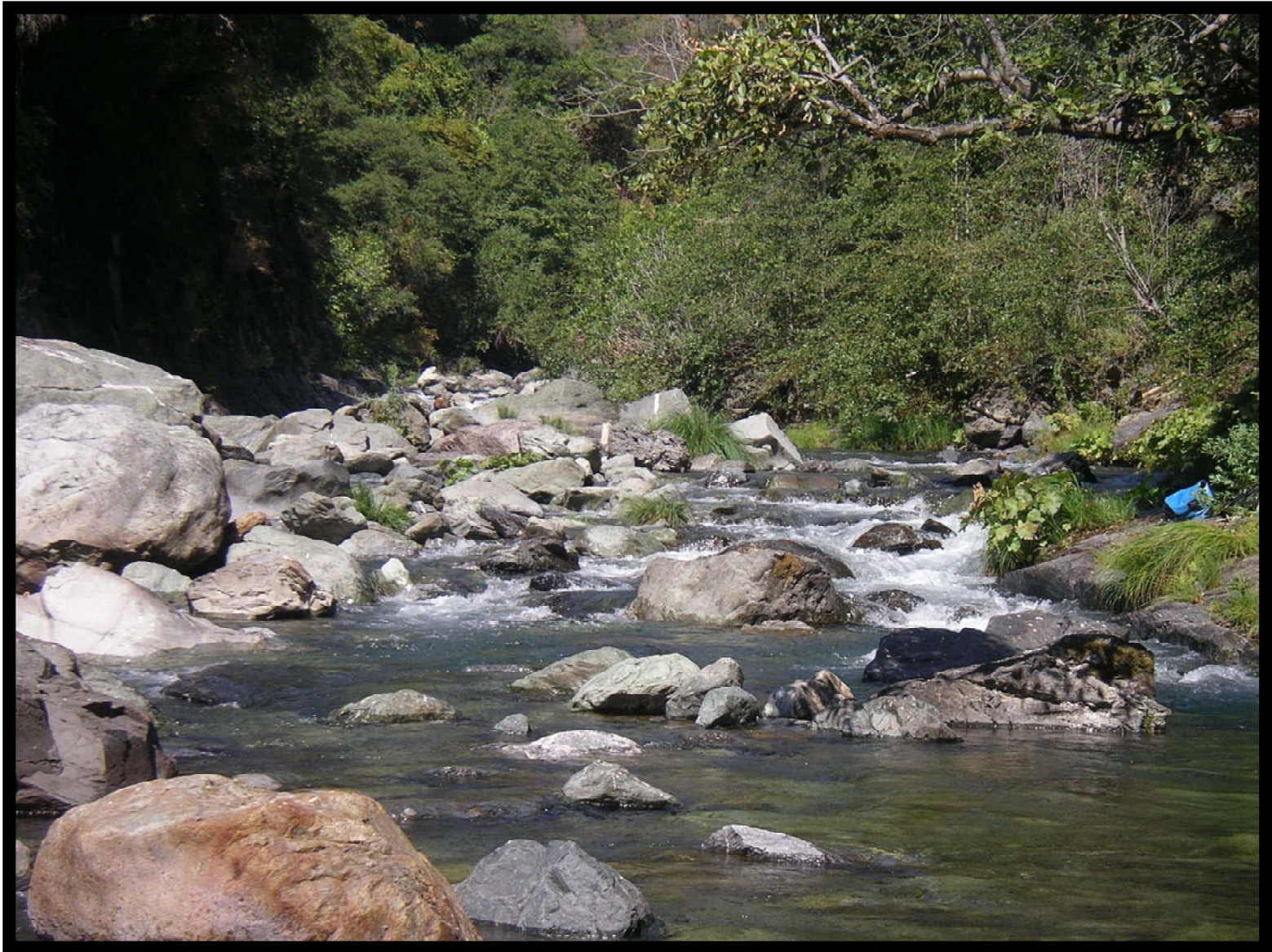
Caption: high gradient riffle downstream of site.



IMG0636

Sept. 19, 2006

Caption: unit 1, step run, looking upstream.



IMG0637

Sept. 19, 2006

Caption: unit 2, low gradient riffle, looking upstream.



IMG0638

Sept. 19, 2006

Caption: unit 2, low gradient riffle, looking upstream.



IMG0639

Sept. 19, 2006

Caption: unit 2, low gradient riffle, looking towards river right.



IMG0640

Sept. 19, 2006

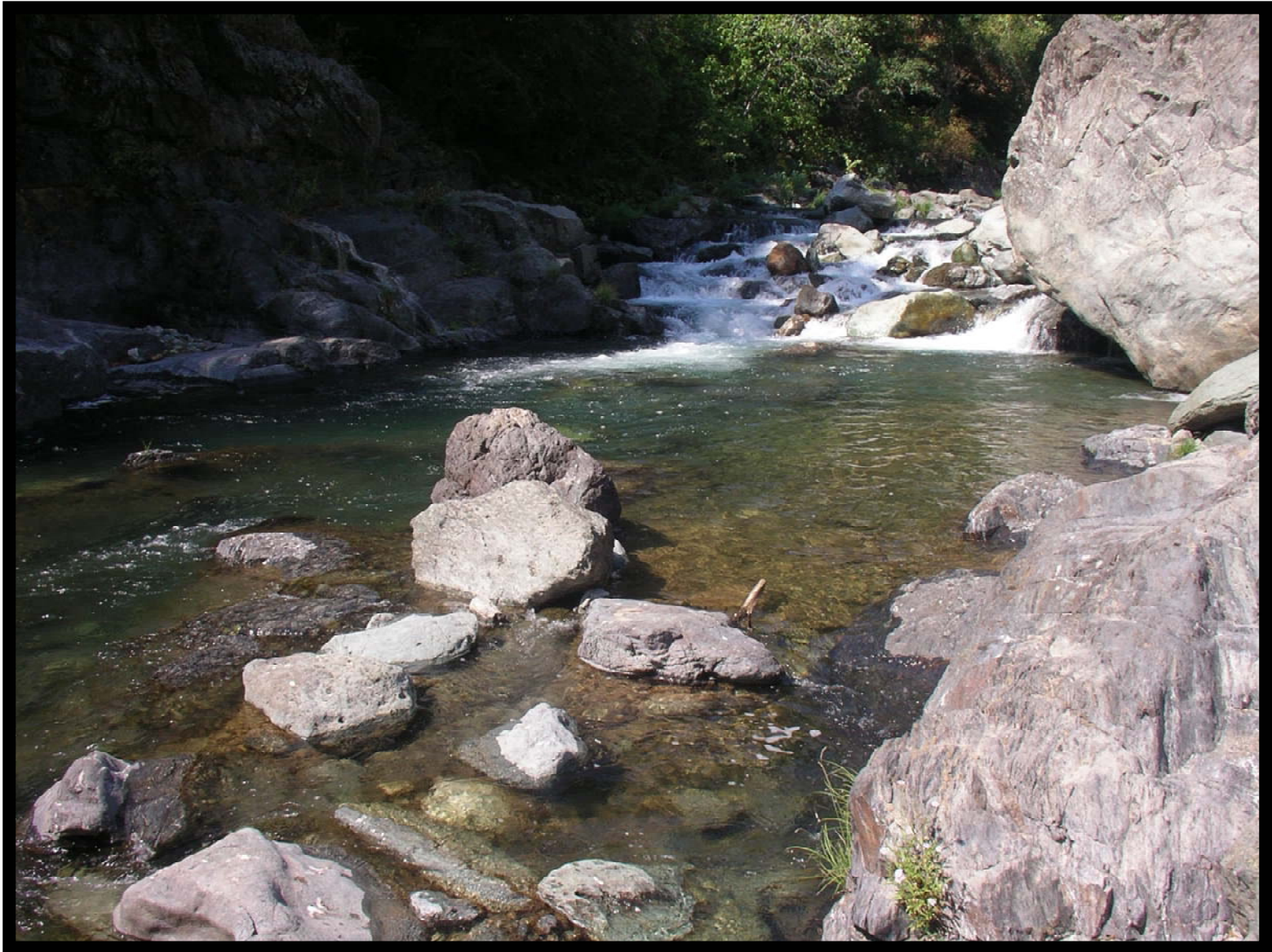
Caption: unit 3, pool habitat, looking upstream.



IMGP0641

Sept. 19, 2006

Caption: unit 4, plunge pool, looking upstream.



IMG0642

Sept. 19, 2006

Caption: unit 4, plunge pool, looking upstream.



IMGP0643

Sept. 19, 2006

Caption: unit 5, pocket water, looking upstream.



IMG0644

Sept. 19, 2006

Caption: unit 5, pocket water, looking upstream.



IMG0645

Sept. 19, 2006

Caption: unit 6, pool habitat, looking upstream.



IMGP0646

Sept. 19, 2006

Caption: unit 6, pool habitat, looking upstream.

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 61.7

Butte Creek Downstream of
Centerville Dam

September 18, 2006

Crew Names: R. Liebig, T. Lucas, N. Bauer



IMGP0606

Sept. 18, 2006

Caption: unit 1, step run, looking upstream.



IMG0607

Sept. 18, 2006

Caption: unit 2, rapid, looking upstream.



IMG0608

Sept. 18, 2006

Caption: unit 4 – off channel pool.



IMG0609

Sept. 18, 2006

Caption: unit 3, mid channel pool, looking upstream.



IMG0610

Sept. 18, 2006

Caption: unit 7 - off channel pool.



IMG0611



IMG0612

Caption: unit 5, plunge pool, looking downstream.

Sept. 18, 2006



IMG0613

IMG0614

Caption: unit 6, plunge pool, looking upstream.

Sept. 18, 2006

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 61.9

Butte Creek Upstream of
Centerville Dam

September 18, 2006

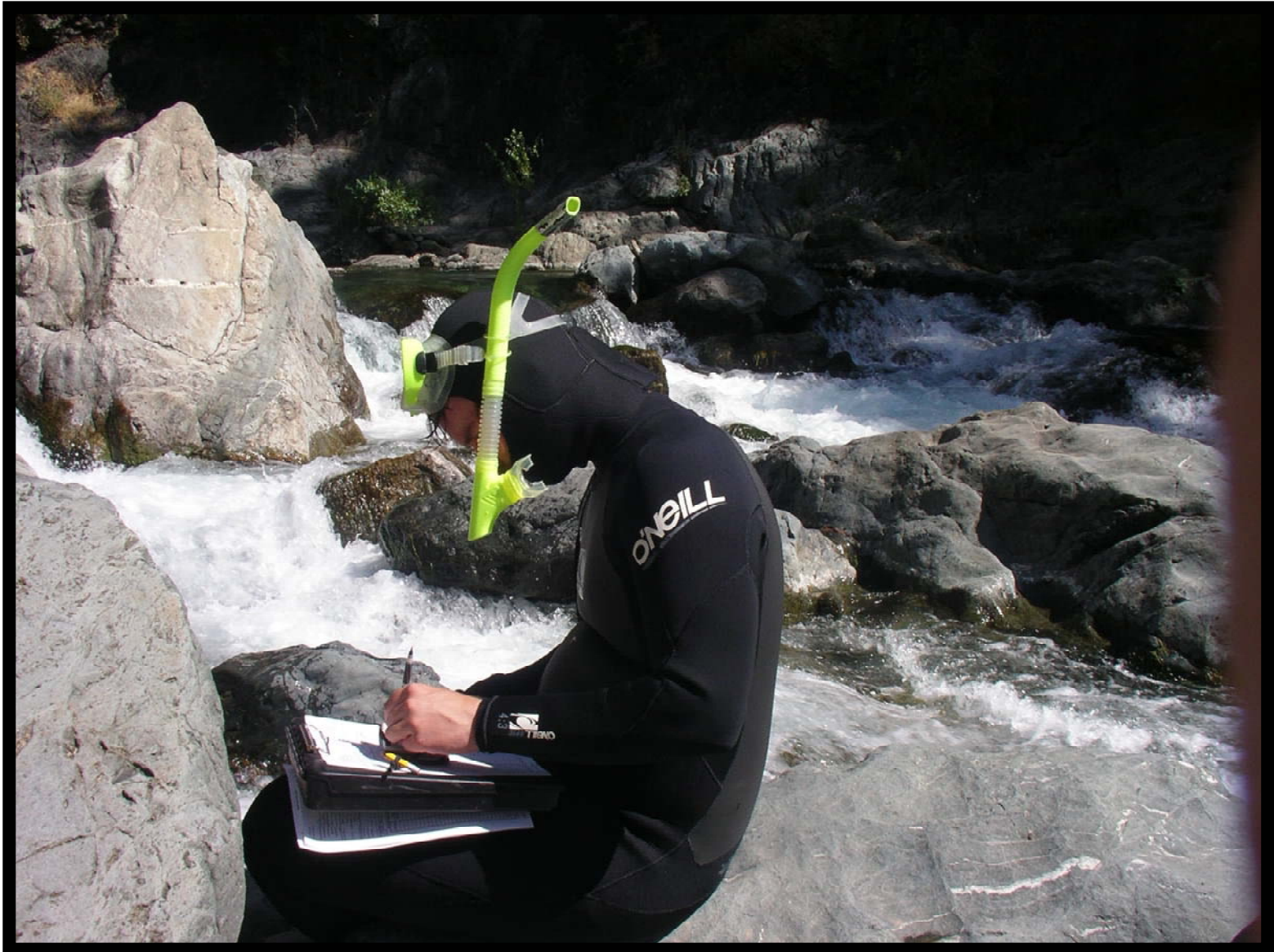
Crew Names: R. Liebig, T. Lucas, N. Bauer



IMG0615

Sept. 18, 06

Caption: intake at dam.



IMGP0616

Sept. 18, 06

Caption: Nick downstream of unit 1.



IMGP0617

Sept. 18, 06

Caption: Trevor downstream of unit 1.



IMG0618

Sept. 18, 06

Caption: unit 1, pool habitat, looking upstream.



IMG0619

Sept. 18, 06

Caption: unit 2, run habitat, looking upstream.



IMG0620

Sept. 18, 06

Caption: unit 2, run habitat, looking upstream.



IMG0621

Sept. 18, 06

Caption: unit 3, pool habitat, looking upstream.



IMGP0622

Sept. 18, 06

Caption: unit 3, pool habitat, looking upstream.



IMG0623

Sept. 18, 06

Caption: potential barrier at top of unit 3.



IMG0624

Sept. 18, 06

Caption: potential barrier at top of unit 3.



IMGP0625

Sept. 18, 06

Caption: above unit 3.



IMG0626

Sept. 18, 06

Caption: above unit 3.



IMG0627

Sept. 18, 06

Caption: above unit 3.

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 65.3

Butte Creek at Doe Mill Bridge

September 17, 2006

Crew names: R. Liebig, K. Jarrett, T. Lucas, N. Bauer,
M. Reil, G. Leverich



IMGP4014

Sept. 17, 2006

Caption: lower net looking towards river left.



IMGP4015

Sept. 17, 2006

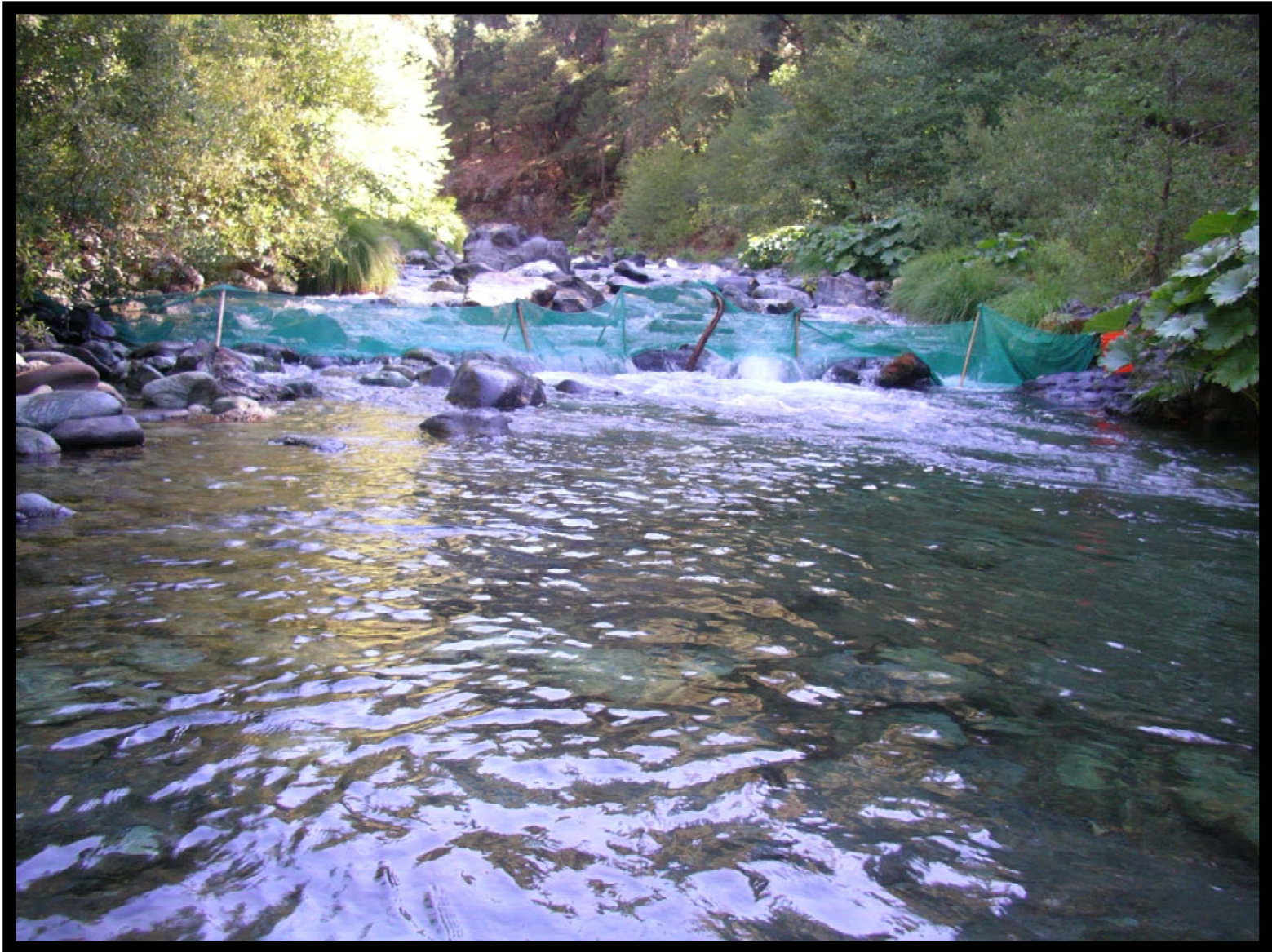
Caption: looking downstream at lower net.



IMGP4016

Sept. 17, 2006

Caption: looking downstream at lower net.



IMGP4017

Sept. 17, 2006

Caption: looking downstream towards middle net.



IMGP4018

Caption: middle net looking towards river left.

Sept. 17, 2006



IMGP4019

Sept. 17, 2006

Caption: middle net looking towards river left.



IMGP4020

Sept. 17, 2006

Caption: looking downstream at middle net.



IMGP4021

Caption: Upper net looking towards river left.

Sept. 17, 2006



IMGP4022

Sept. 17, 2006

Caption: looking upstream at upper net.



IMGP4023

Sept. 17, 2006

Caption: looking downstream at upper net.

PG&E DeSabra Centerville Relicensing

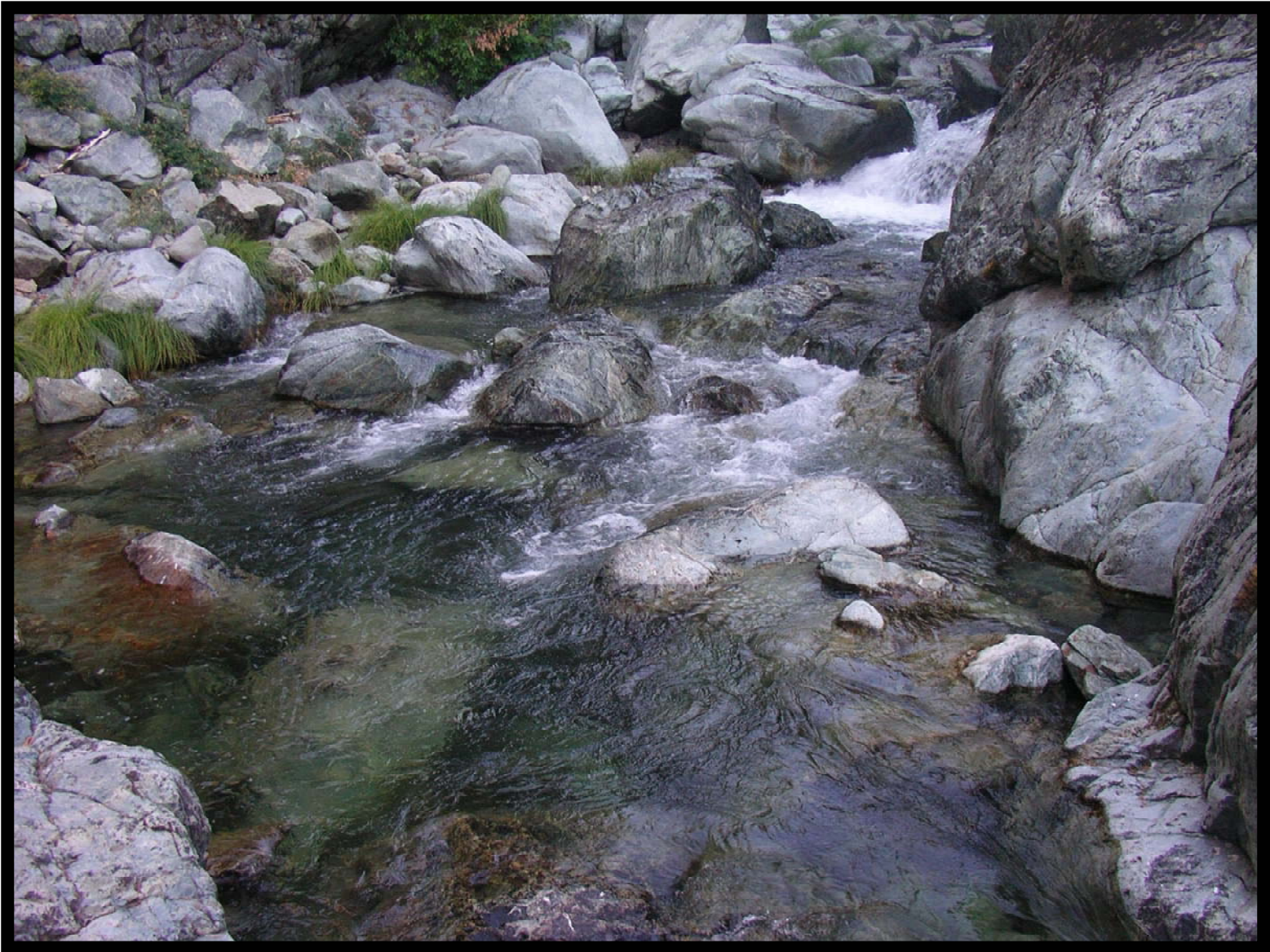
Fish Populations Study

Butte 71.8

Butte Creek Downstream of
Butte Creek Diversion Dam

October 14, 2006

T. Lucas, B. Amerson, N. Bauer, M. Malko



IMGP0765

October 14, 2006

Caption: Unit 1, run, looking upstream.



IMGP0766

October 14, 2006

Caption: Unit 1, run, looking downstream.



IMGP0767

October 14, 2006

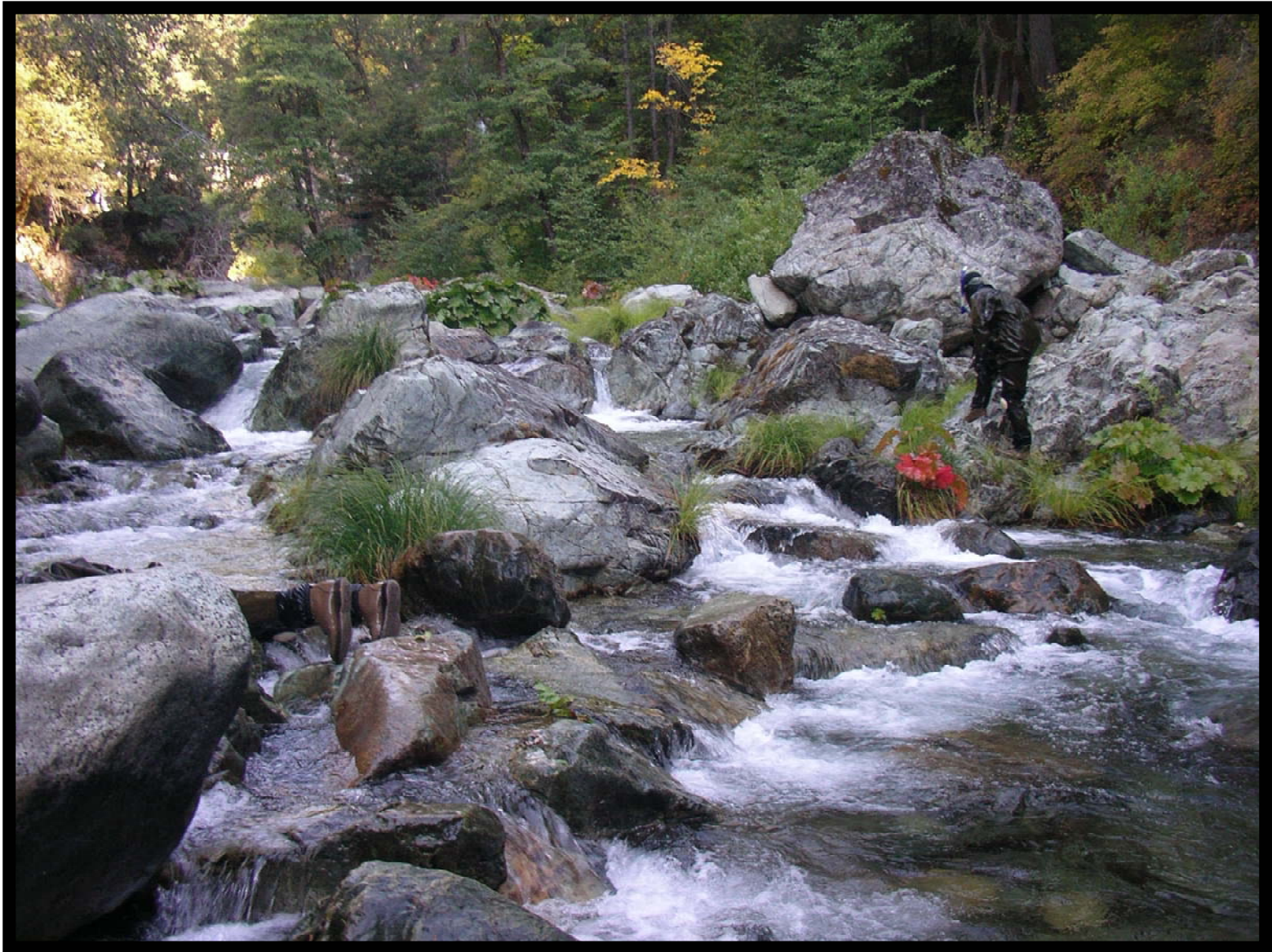
Caption: Unit 1, run, looking downstream.



IMG0768

October 14, 2006

Caption: Unit2, step run, looking upstream.



IMGP0769

October 14, 2006

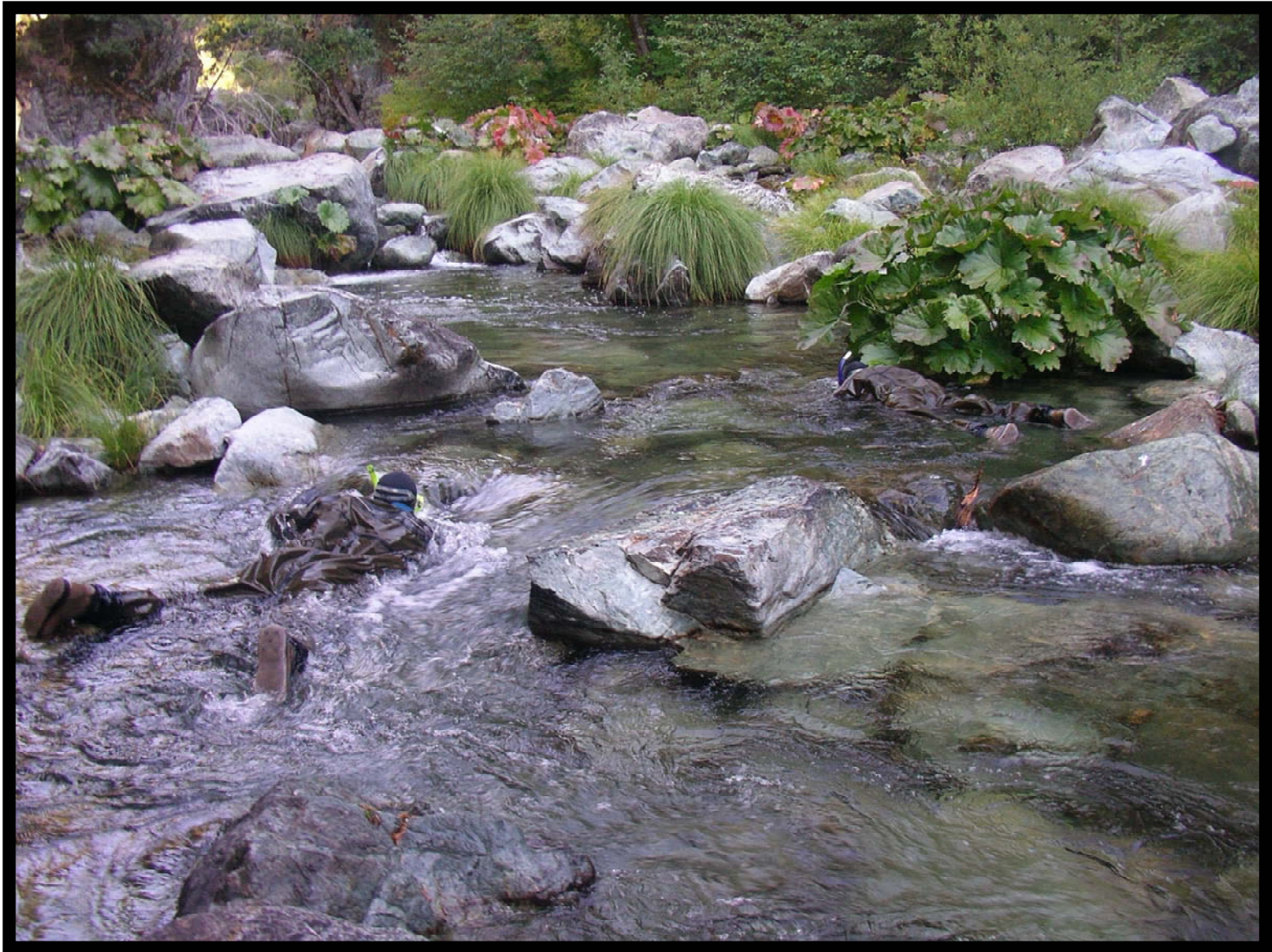
Caption: Unit 3, high gradient riffle, looking upstream.



IMG0770

October 14, 2006

Caption: Unit 3, high gradient riffle, looking downstream.



IMGP0771

October 14, 2006

Caption: Unit 4, run, looking upstream.



IMGP0772

October 14, 2006

Caption: Unit 4, run, looking downstream.



IMGP0773

October 14, 2006

Caption: Unit 5, pool, looking upstream.



IMG0774

October 14, 2006

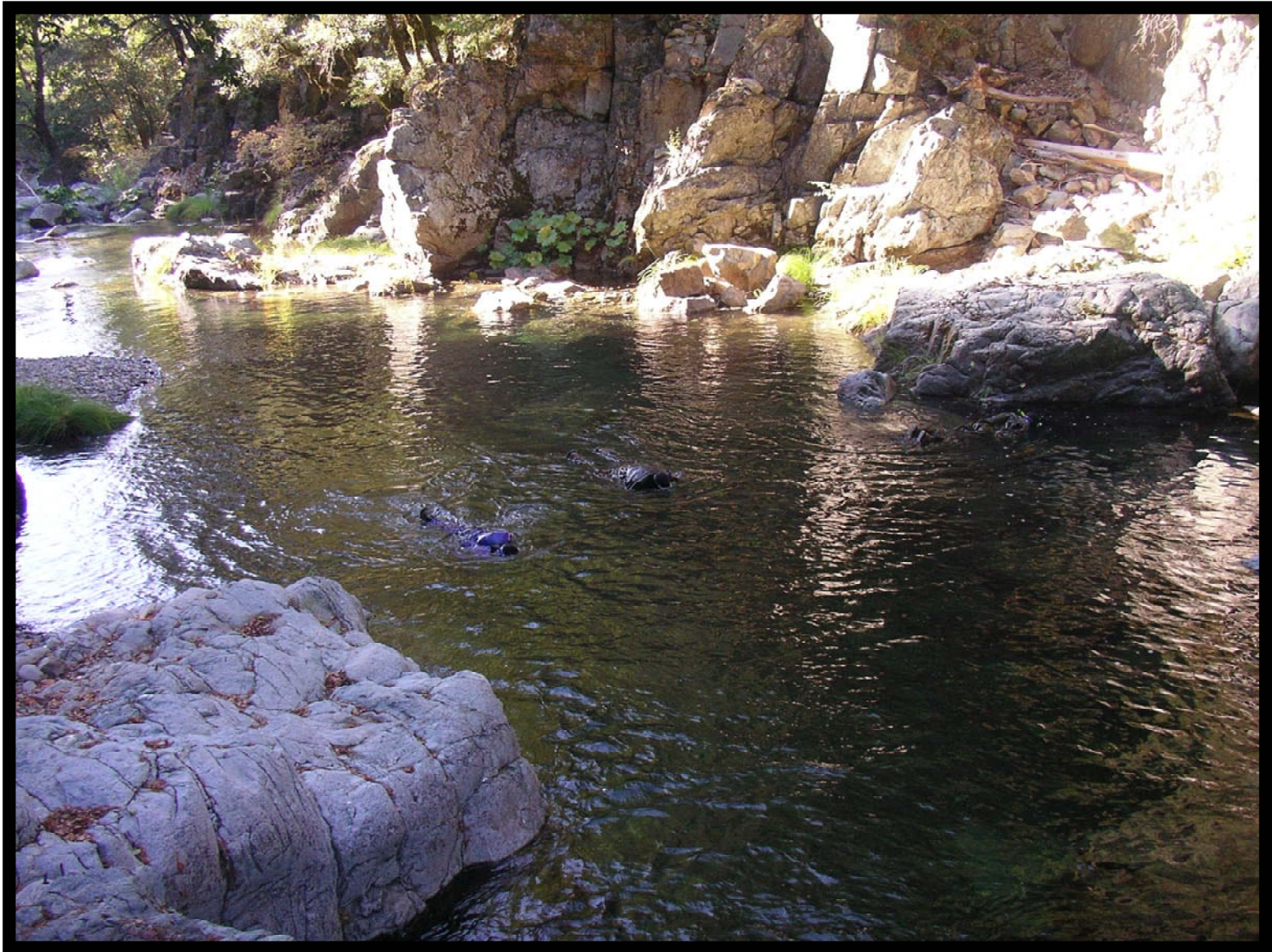
Caption: Unit 5, pool, looking upstream.



IMG0775

October 14, 2006

Caption: Unit 5, pool, looking downstream.



IMG0776

October 14, 2006

Caption: Unit 5, pool, looking downstream.

PG&E DeSabra Centerville Relicensing

Fish Populations Study

Butte 72.2

Butte Creek Upstream of Butte Creek Diversion

October 14, 2006

T. Lucas, B. Amerson, N. Bauer, M. Malko



IMGP0777

Oct. 14, 2006

Caption: Unit 1, run, looking upstream.



IMGP0778

Oct. 14, 2006

Caption: Unit 1, run, looking downstream.



IMG0779

Oct. 14, 2006

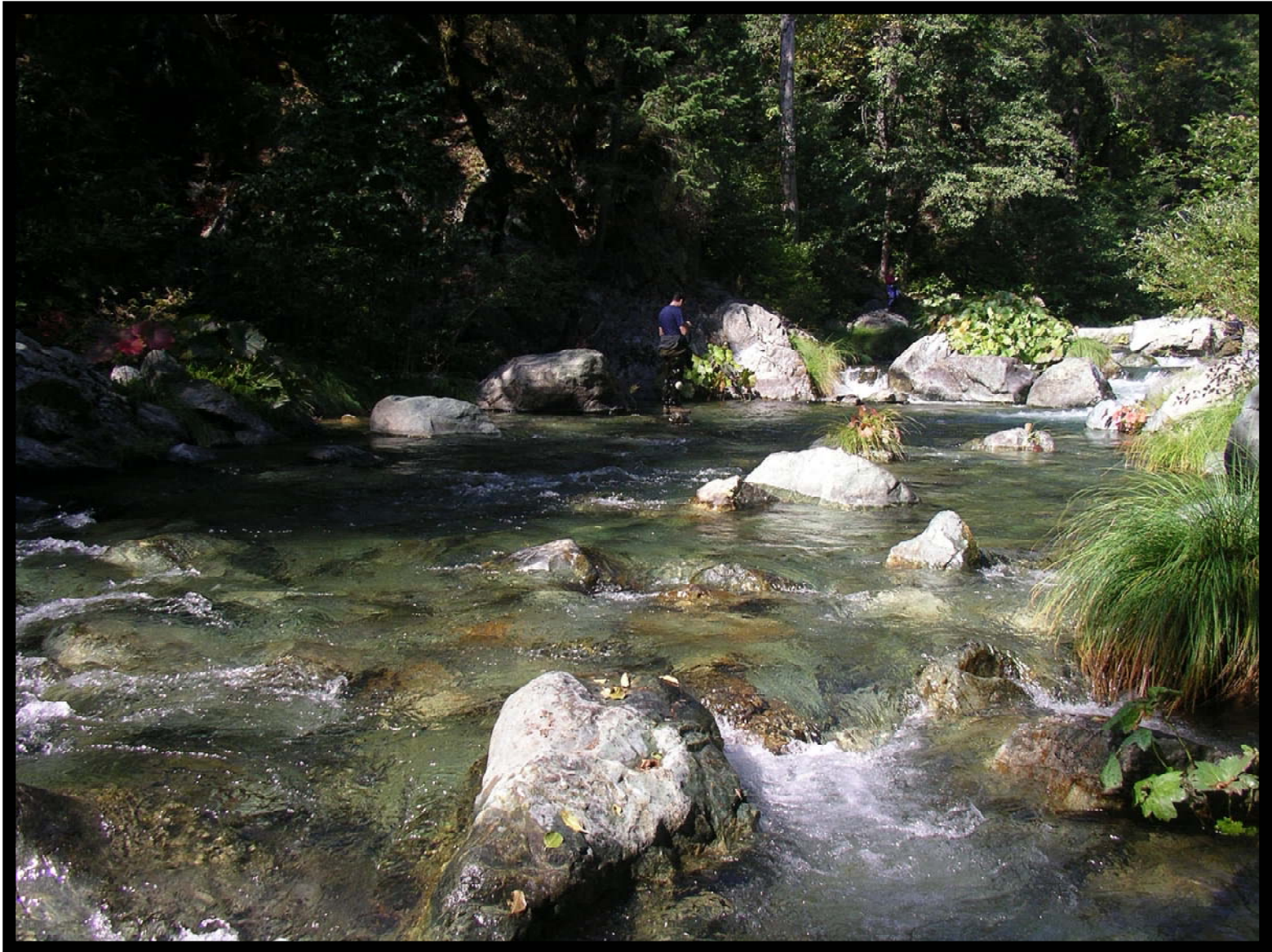
Caption: Unit 2, high gradient riffle, looking upstream.



IMGP0780

Oct. 14, 2006

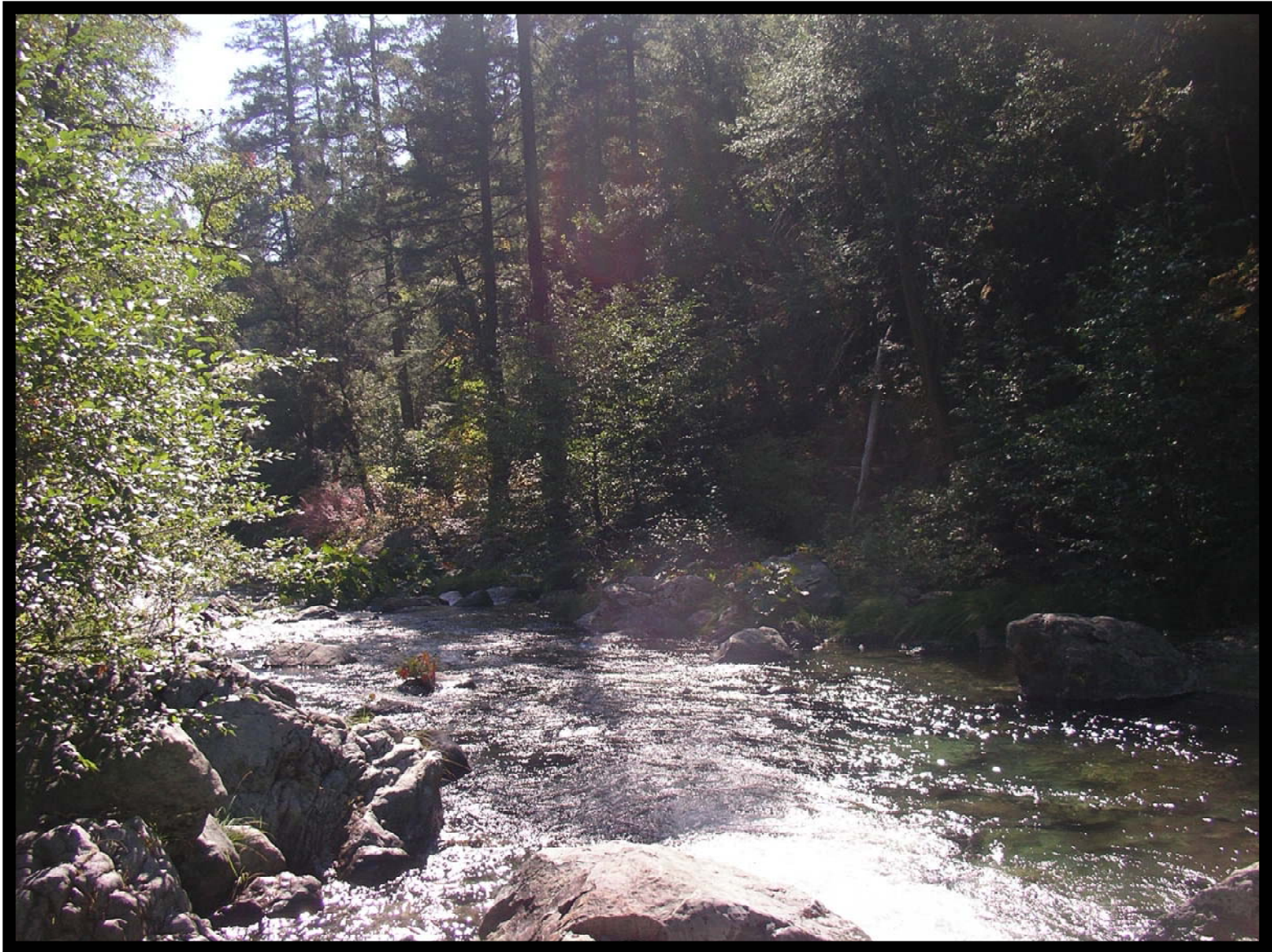
Caption: Unit 2, high gradient riffle, looking downstream.



IMG0781

Oct. 14, 2006

Caption: Unit 3, run, looking upstream.



IMGP0782

Oct. 14, 2006

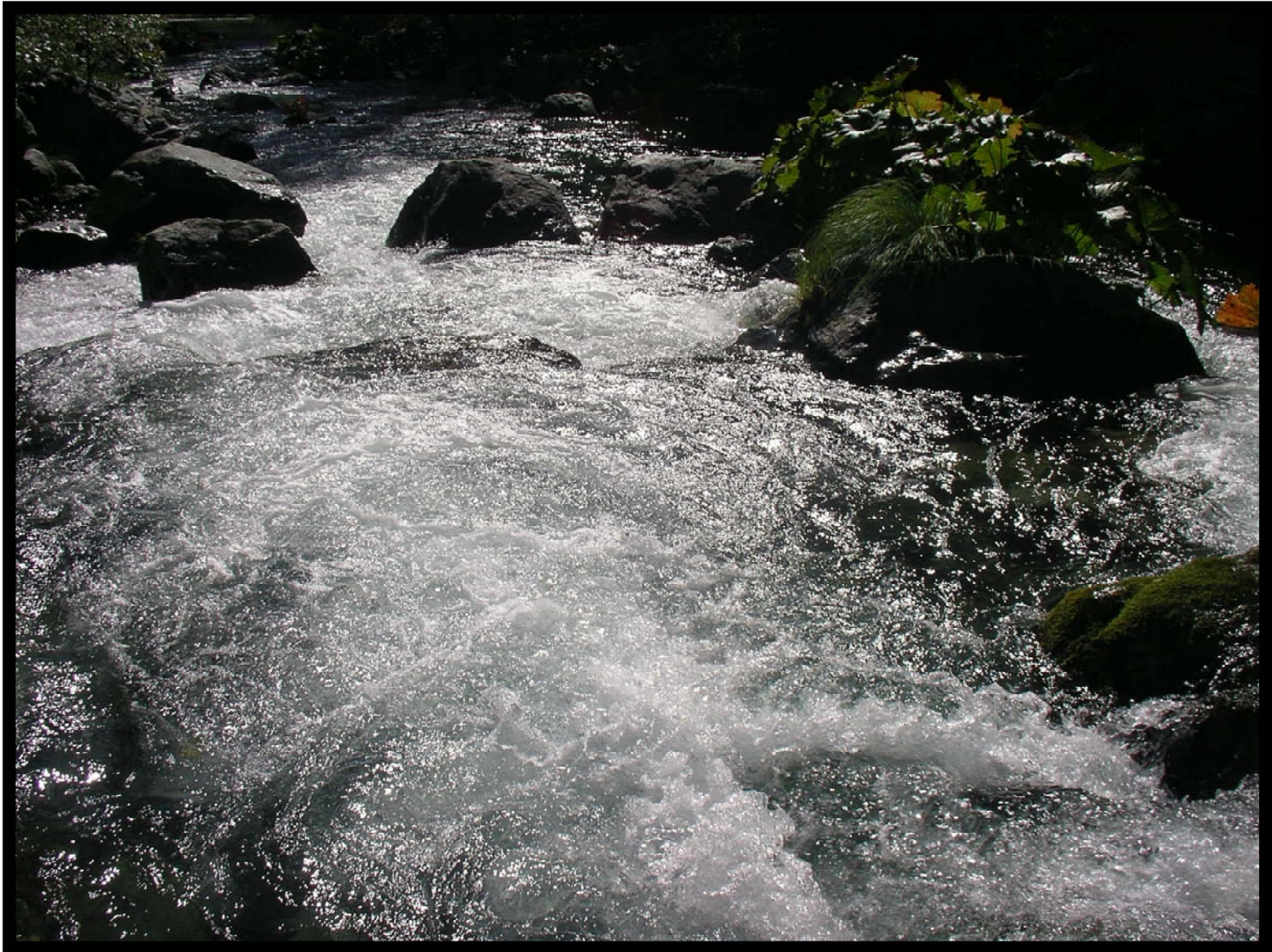
Caption: Unit 3, run, looking downstream.



IMGP0783

Oct. 14, 2006

Caption: Unit 4, high gradient riffle, looking upstream.



IMGP0784

Oct. 14, 2006

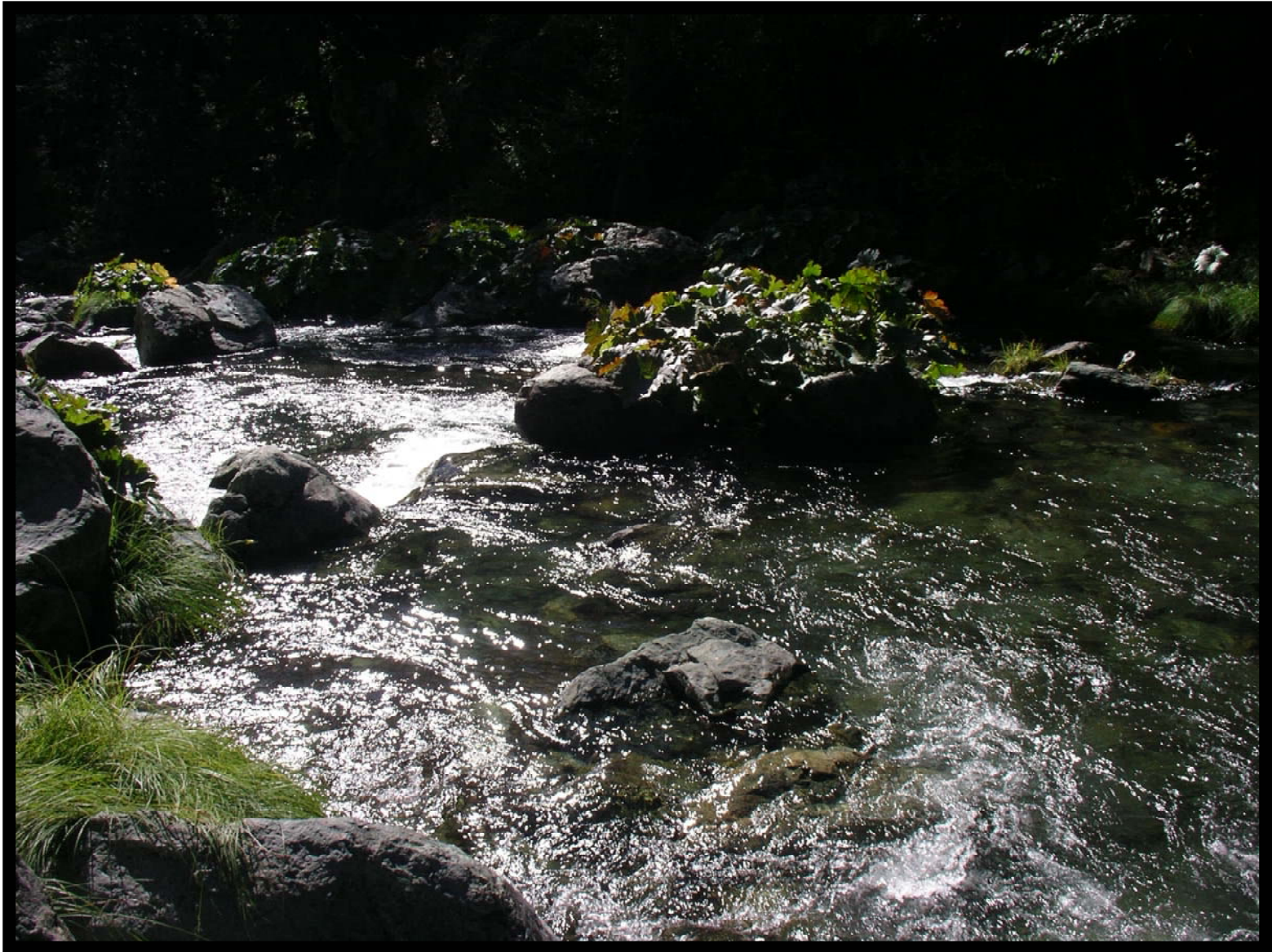
Caption: Unit 4, high gradient riffle, looking downstream.



IMG0785

Oct. 14, 2006

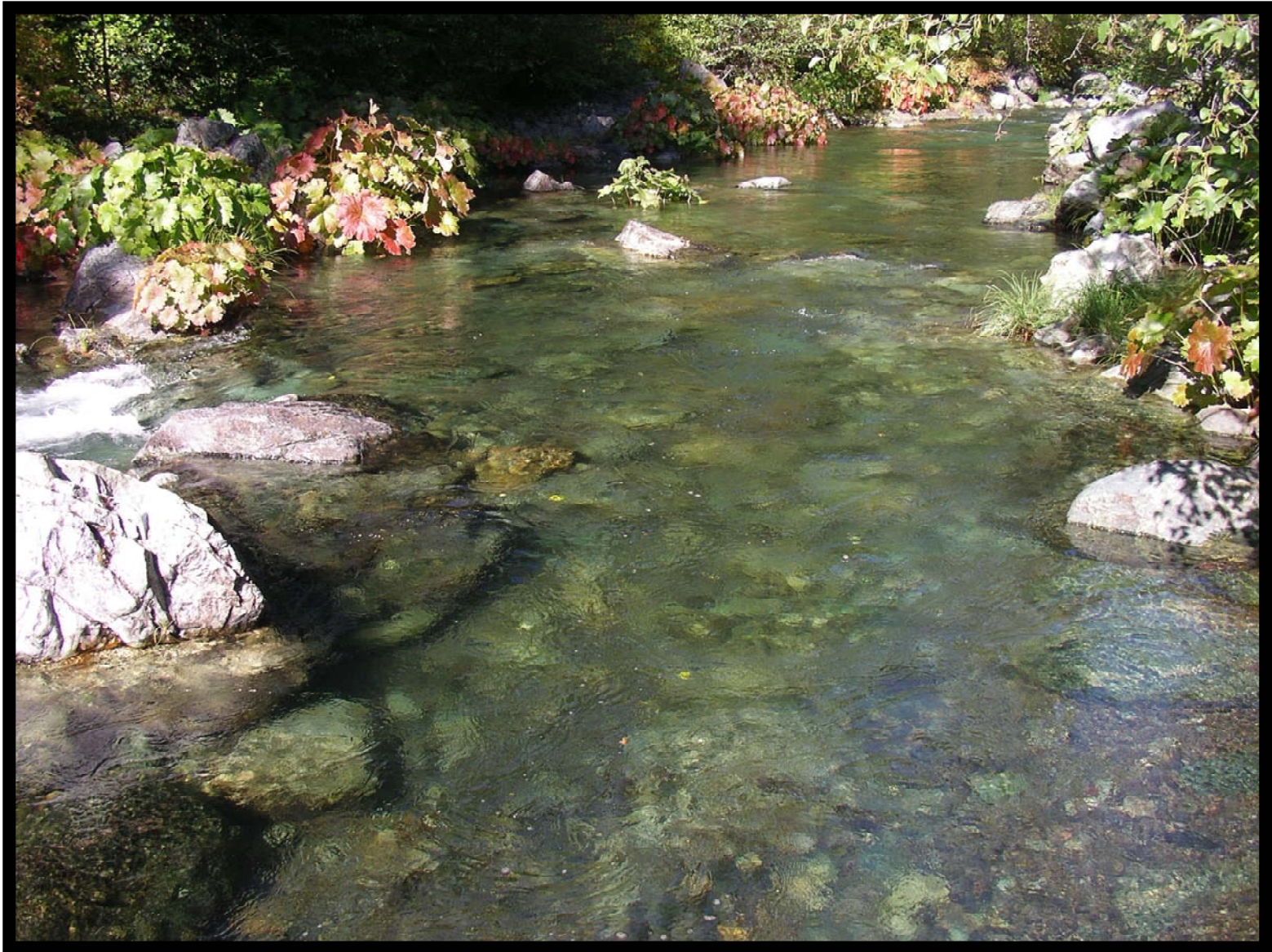
Caption: Unit 5, step run, looking upstream.



IMG0786

Oct. 14, 2006

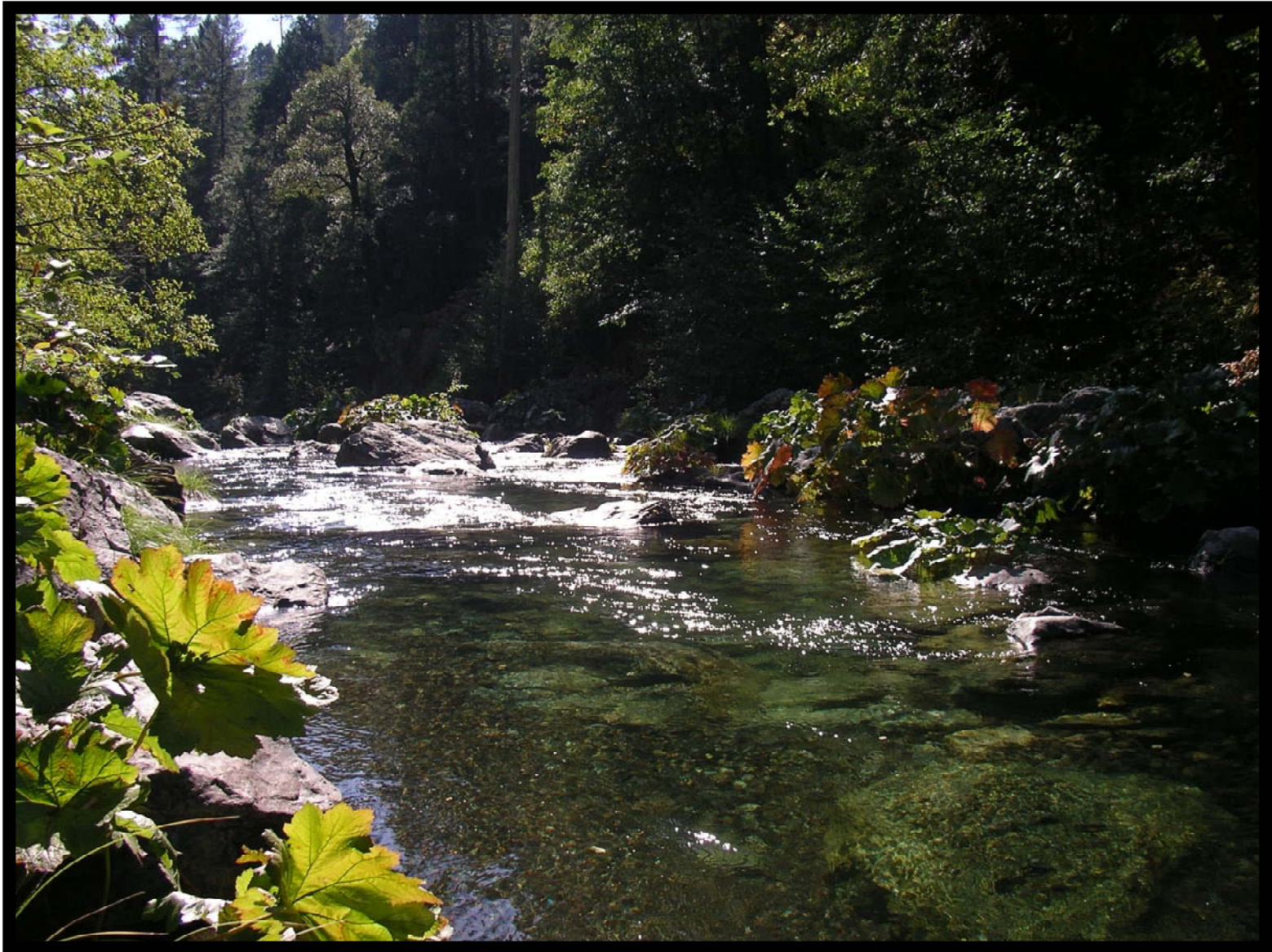
Caption: Unit 5, step run, looking downstream.



IMG0787

Oct. 14, 2006

Caption: Unit 6, run, looking upstream.



IMGP0788

Oct. 14, 2006

Caption: Unit 6, run, looking downstream.



IMGP0789

Oct. 14, 2006

Caption: Unit 7, mid channel pool, looking downstream.



IMGP0790

Oct. 14, 2006

Caption: Unit 7, mid channel pool, looking upstream.