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Supplementary material

Spatially dynamic maternal control of migratory fish recruitment pulses triggered by shifting seasonal cues

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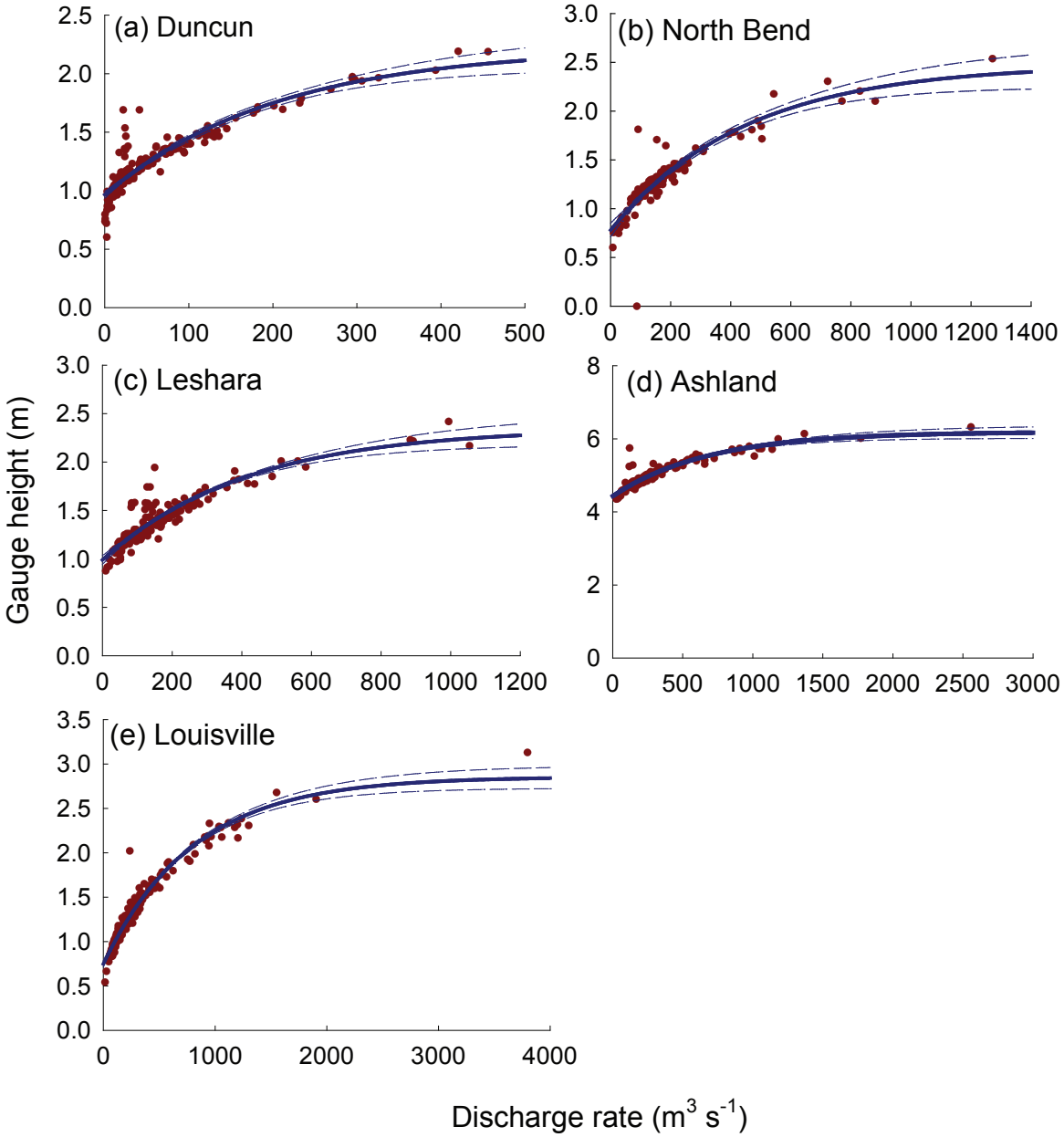

Fig. S1. Relationships between gauge height and discharge rate measured at five gauging stations along the Lower Platte River (NE, USA), Duncan (USGS station #06774000), North Bend (#06796000), Leshara (#06796500), Ashland (#06801000) and Louisville (#06805500), during 1995–2011. Data are obtained from the USGS National Water Information System (http://waterdata.usgs.gov/nwis). Solid lines indicate model fitted values, and dashed lines indicate 95% confidence intervals.

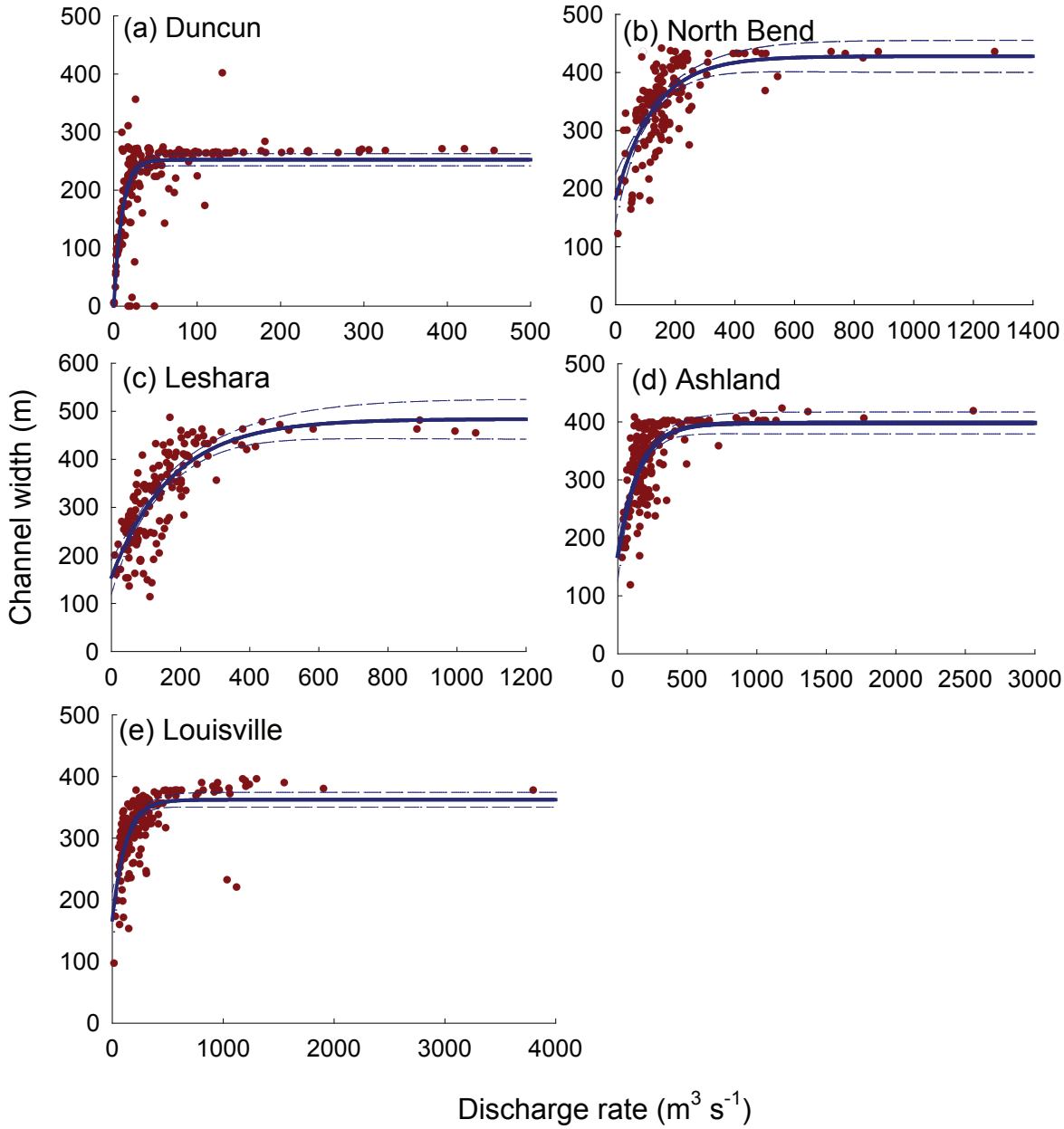

Fig. S2. Relationships between channel width and discharge rate measured at five gauging stations along the Lower Platte River (NE, USA), Duncan (USGS station #06774000), North Bend (#06796000), Leshara (#06796500), Ashland (#06801000) and Louisville (#06805500), during 1995–2011. Data are obtained from the USGS National Water Information System (http://waterdata.usgs.gov/nwis). Solid lines indicate model fitted values, and dashed lines indicate 95% confidence intervals.

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Table S1. Parameter estimates for wave functions used to model daily, depth averaged water temperature of the Lower Platte River (NE, USA) in the sturgeon biophysical model simulations

Functions are fitted to field survey data on mean water temperature measured at the Louisville gauging station (USGS station #06805500) during 1995–2011. Data are obtained from the USGS National Water Information System (http://waterdata.usgs.gov/nwis)

year	α_T	β_T	γ_T
1995	13.5	16.2	0.00053
1996	10.8	11.2	3.13
1997	12.8	13.2	0.053
1998	13.8	12.2	5.53
1999	13.1	11.2	2.53
2000	12.8	12.2	1.53
2001	13.6	12.2	5.53
2002	13.8	12.2	3.53
2003	12.8	12.2	4.53
2004	12.8	13.2	3.53
2005	15.1	14.7	0.053
2006	12.8	12.3	1.53
2007	14.8	14.2	3.53
2008	13.1	15.5	3.23
2009	14.2	12.7	3.75
2010	14.5	13.5	4.48
2011	14.8	14.2	3.53