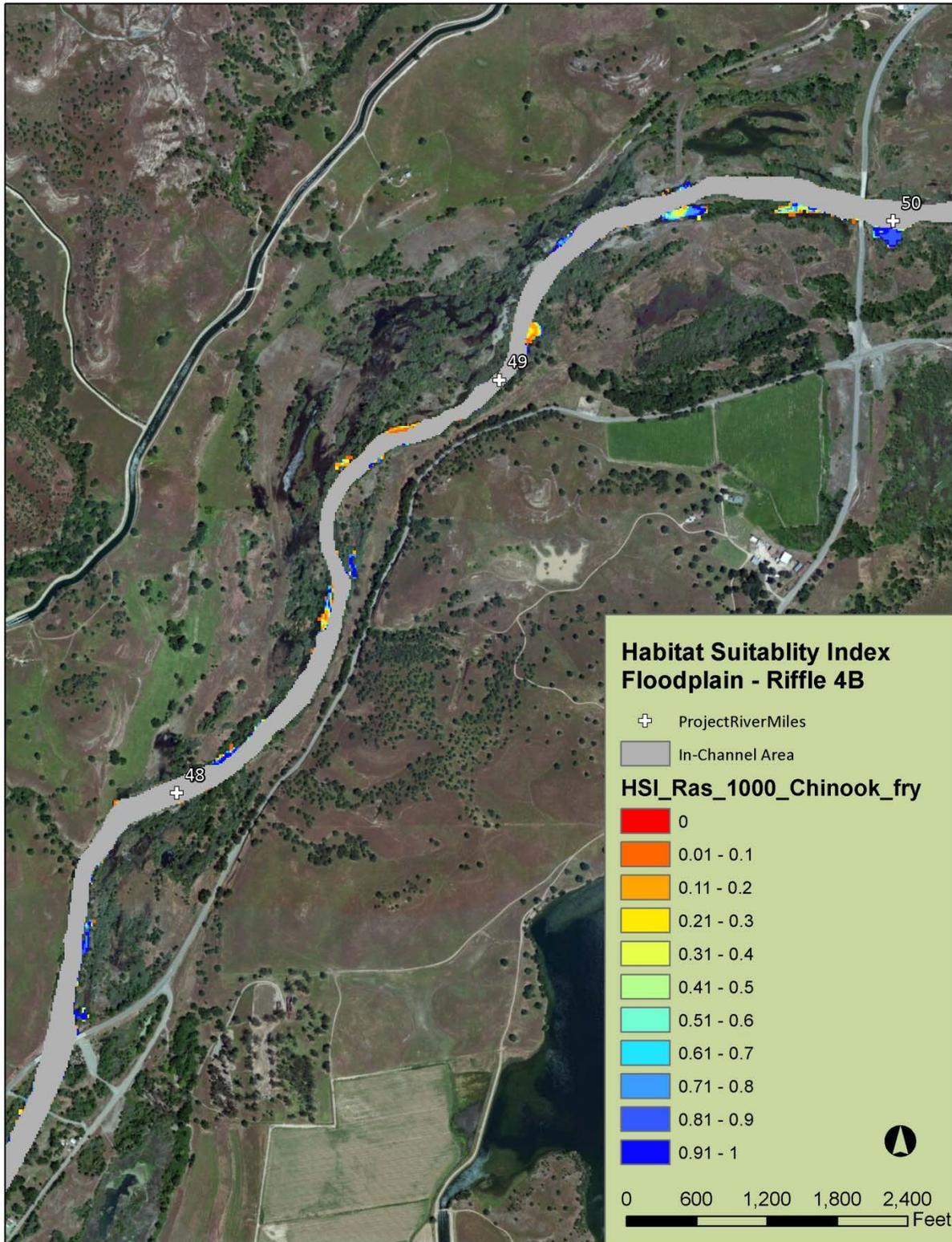


**STUDY REPORT W&AR-21  
THE LOWER TUOLUMNE RIVER FLOODPLAIN HYDRAULIC  
ASSESSMENT**

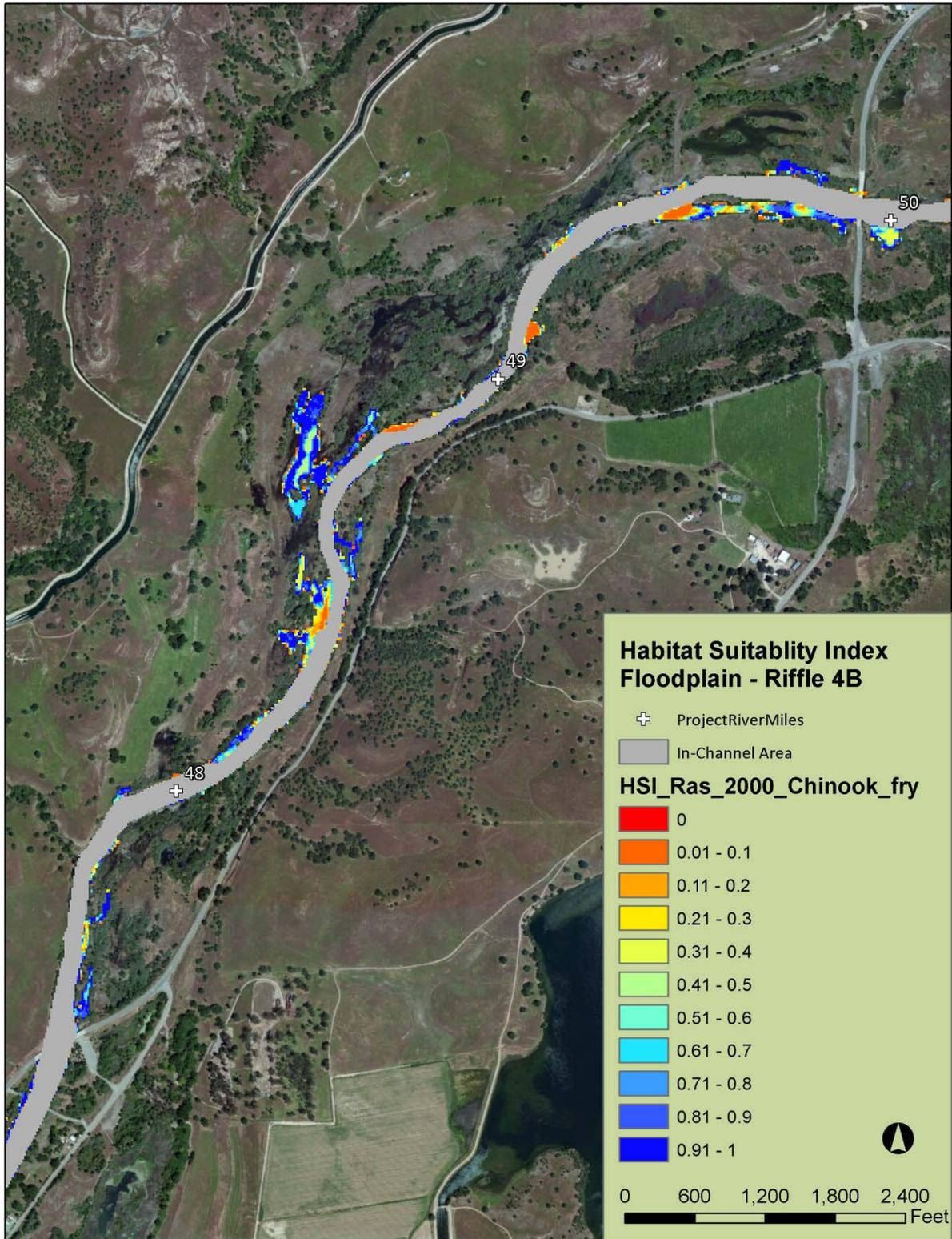
**ATTACHMENT I**

**USEABLE HABITAT AREAS AT REPRESENTATIVE SITES**

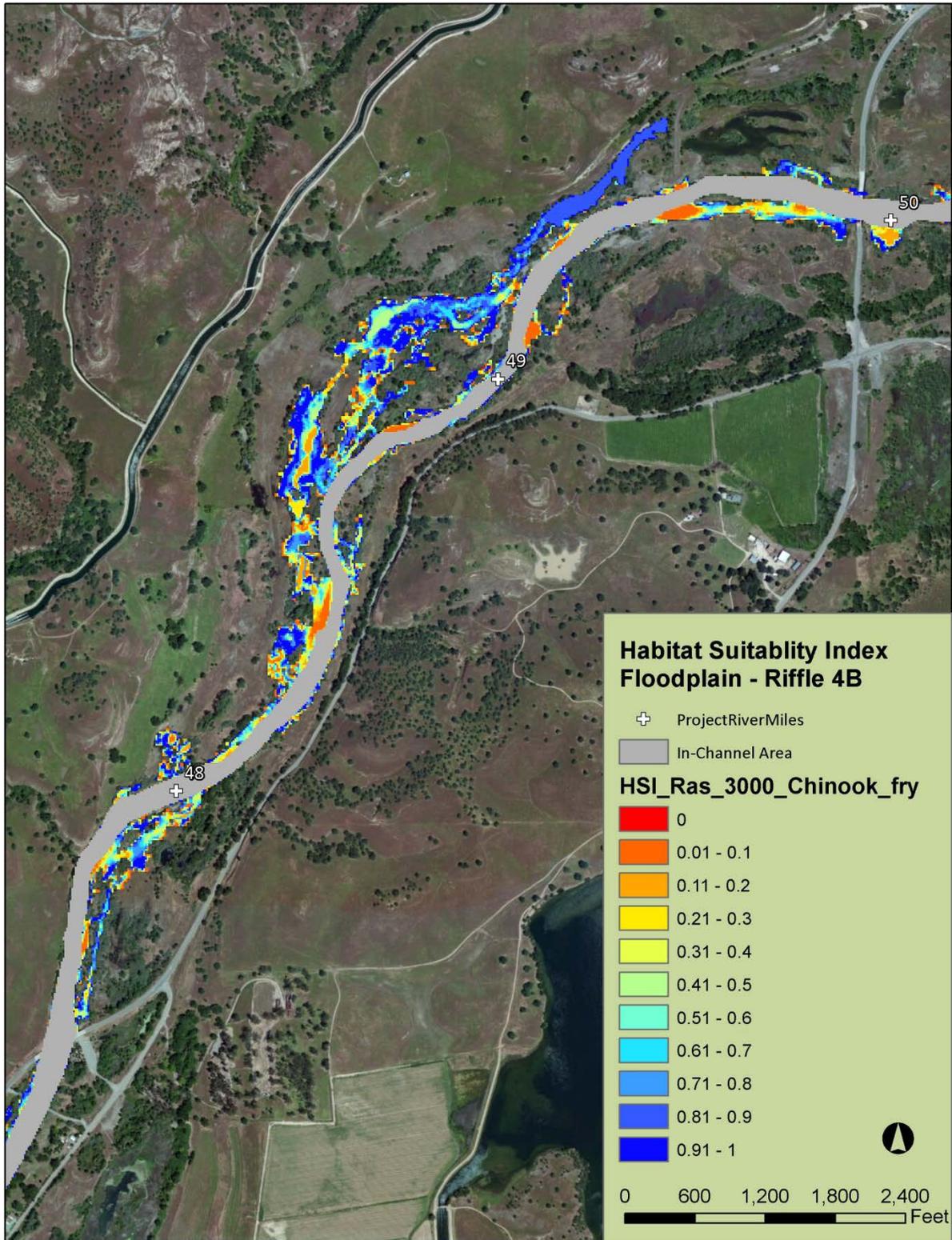
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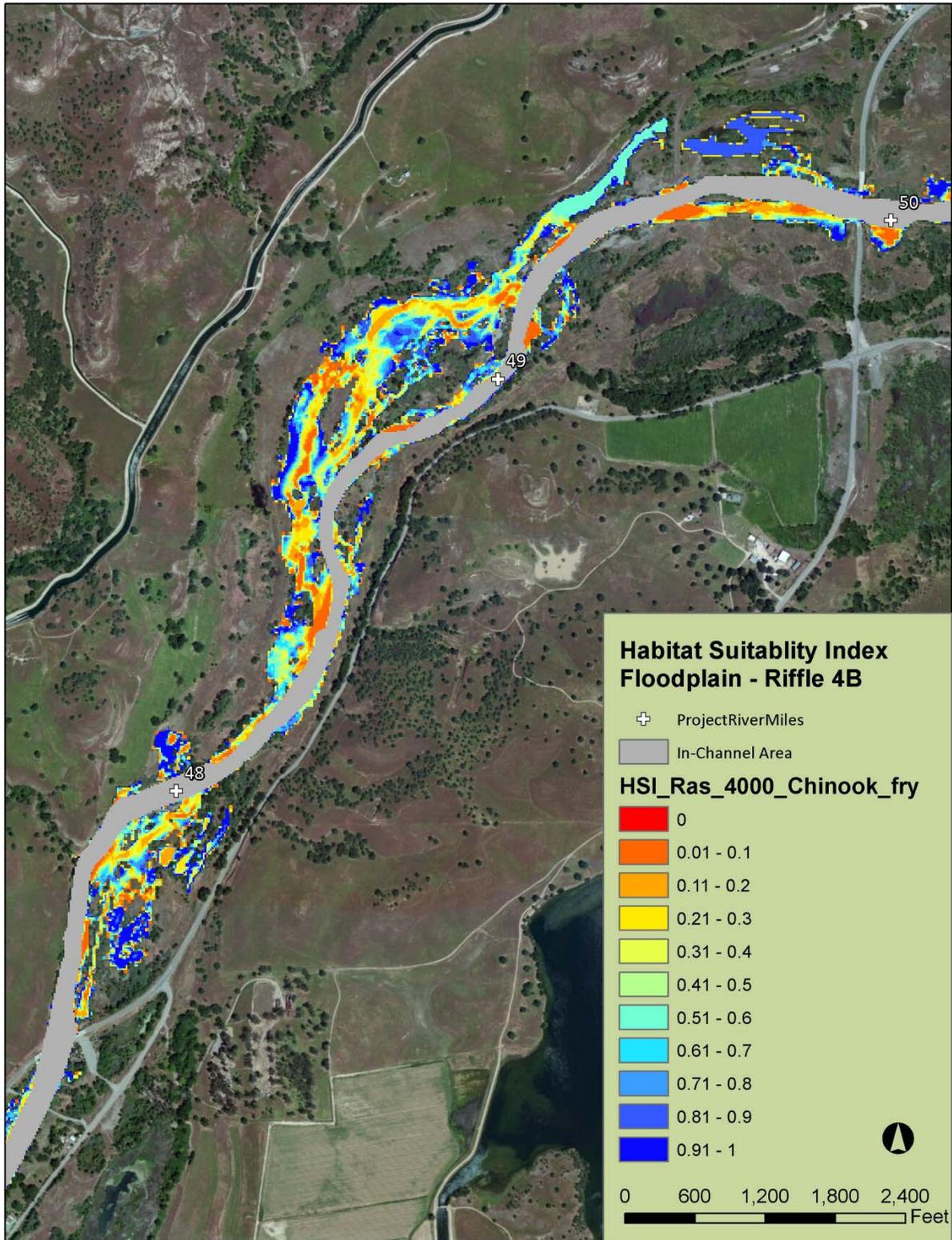
**Figure 1. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



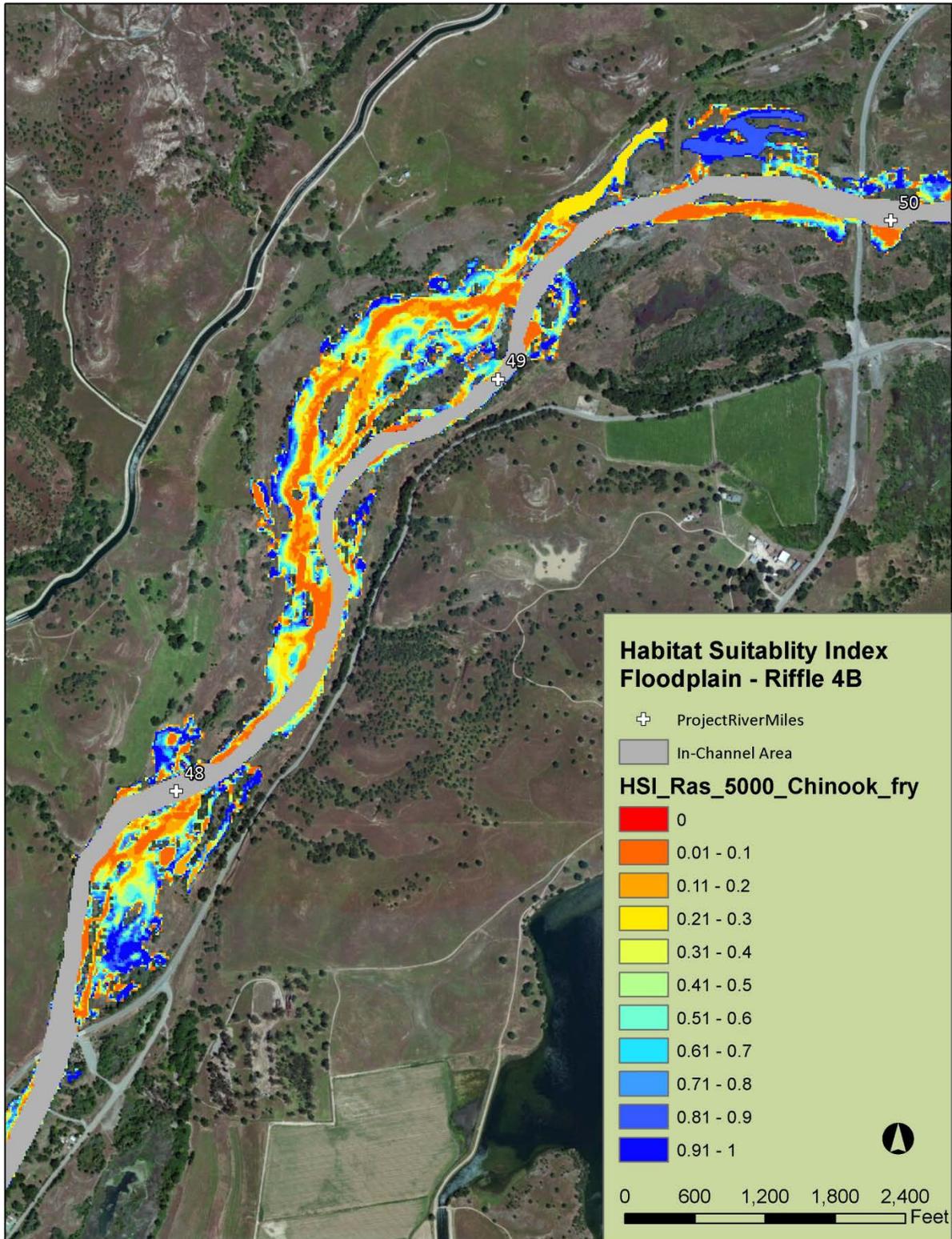
**Figure 2. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



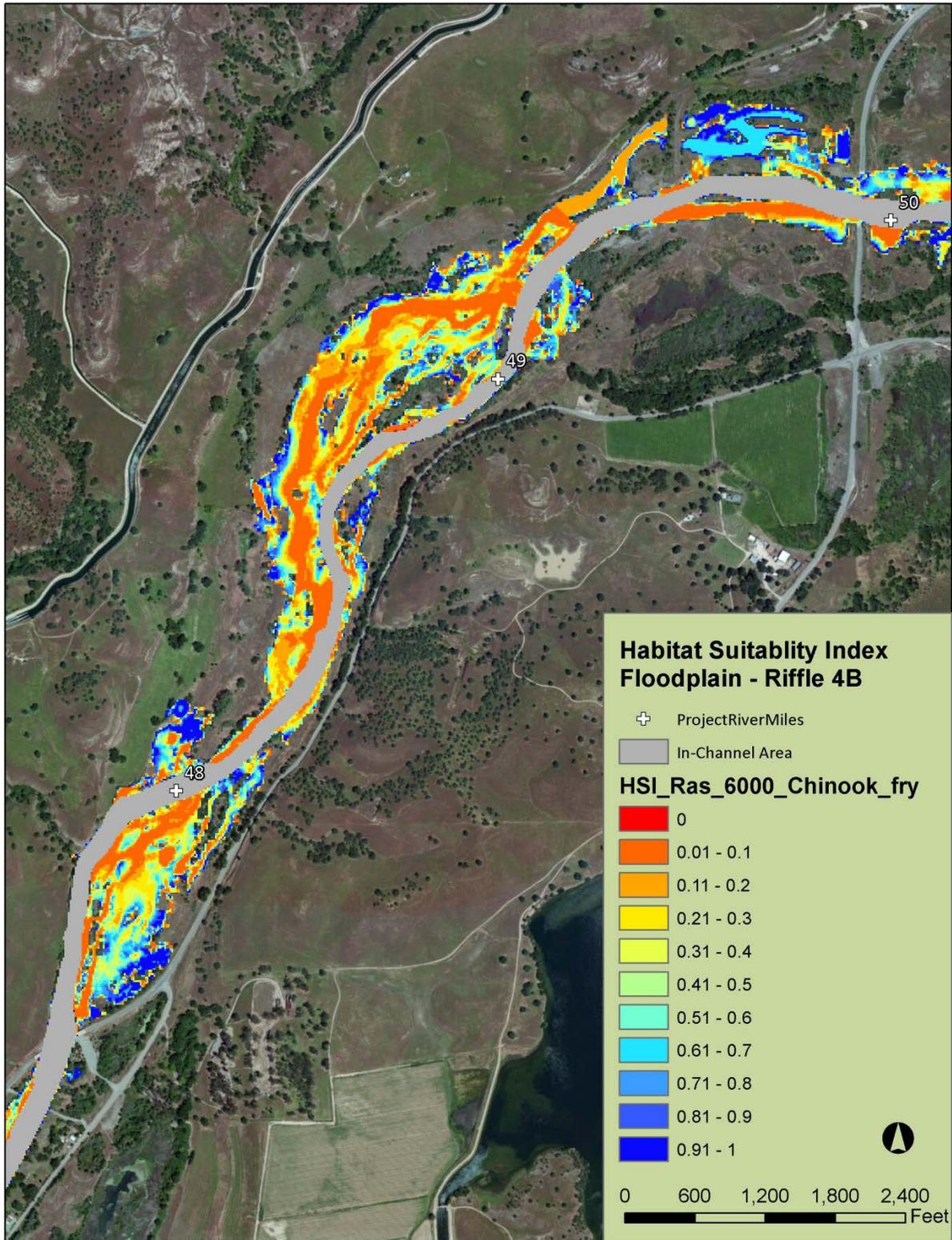
**Figure 3. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



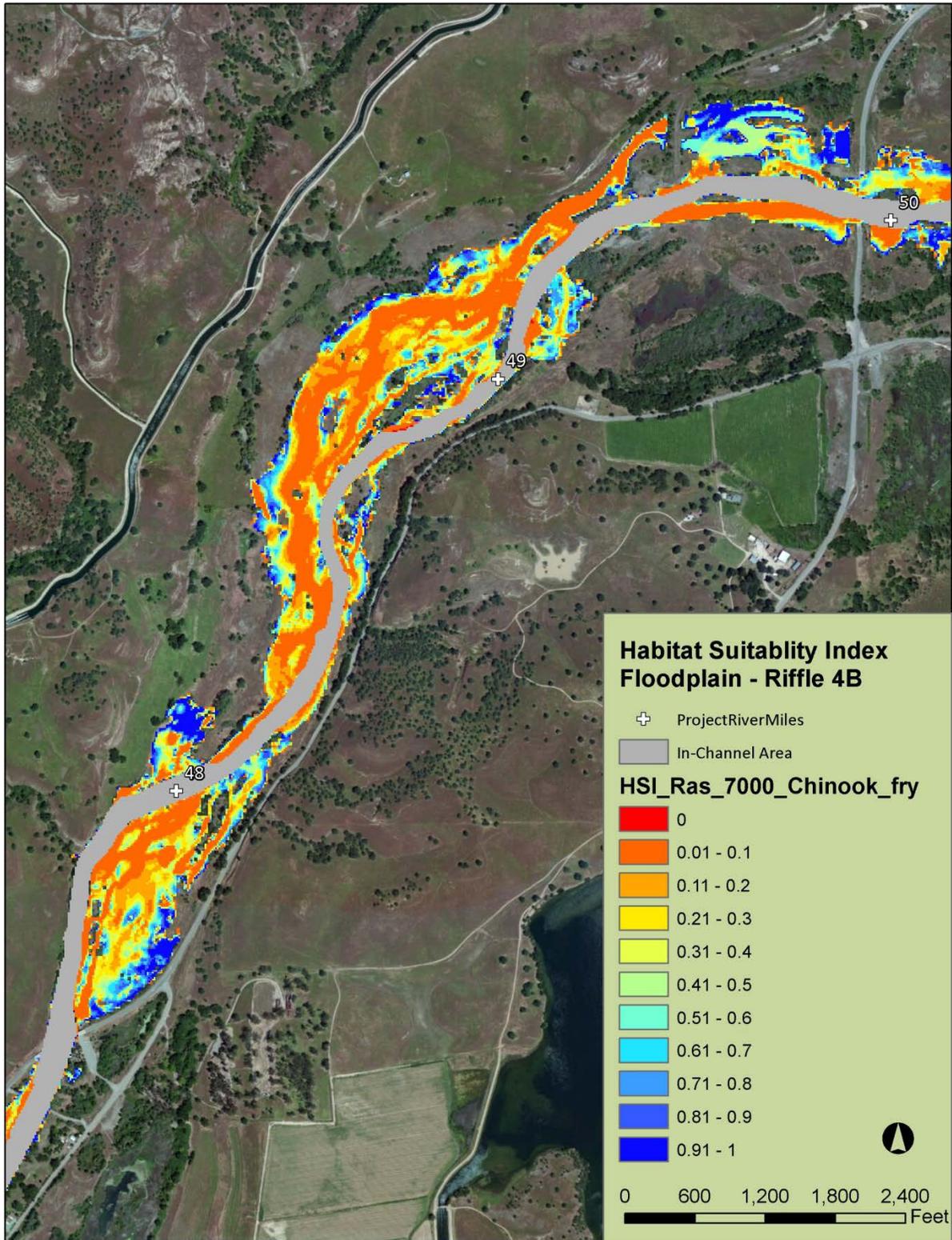
**Figure 4. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



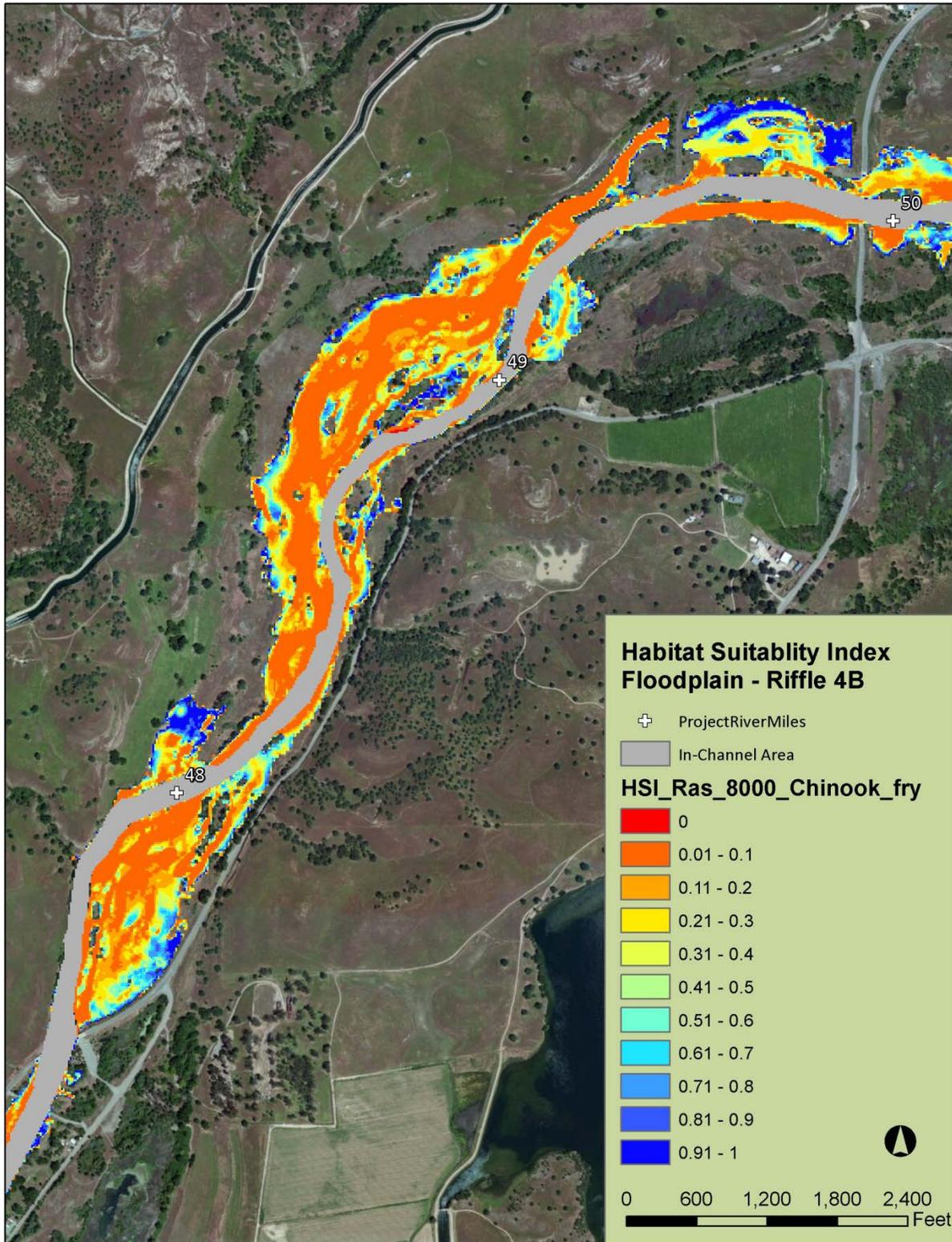
**Figure 5. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



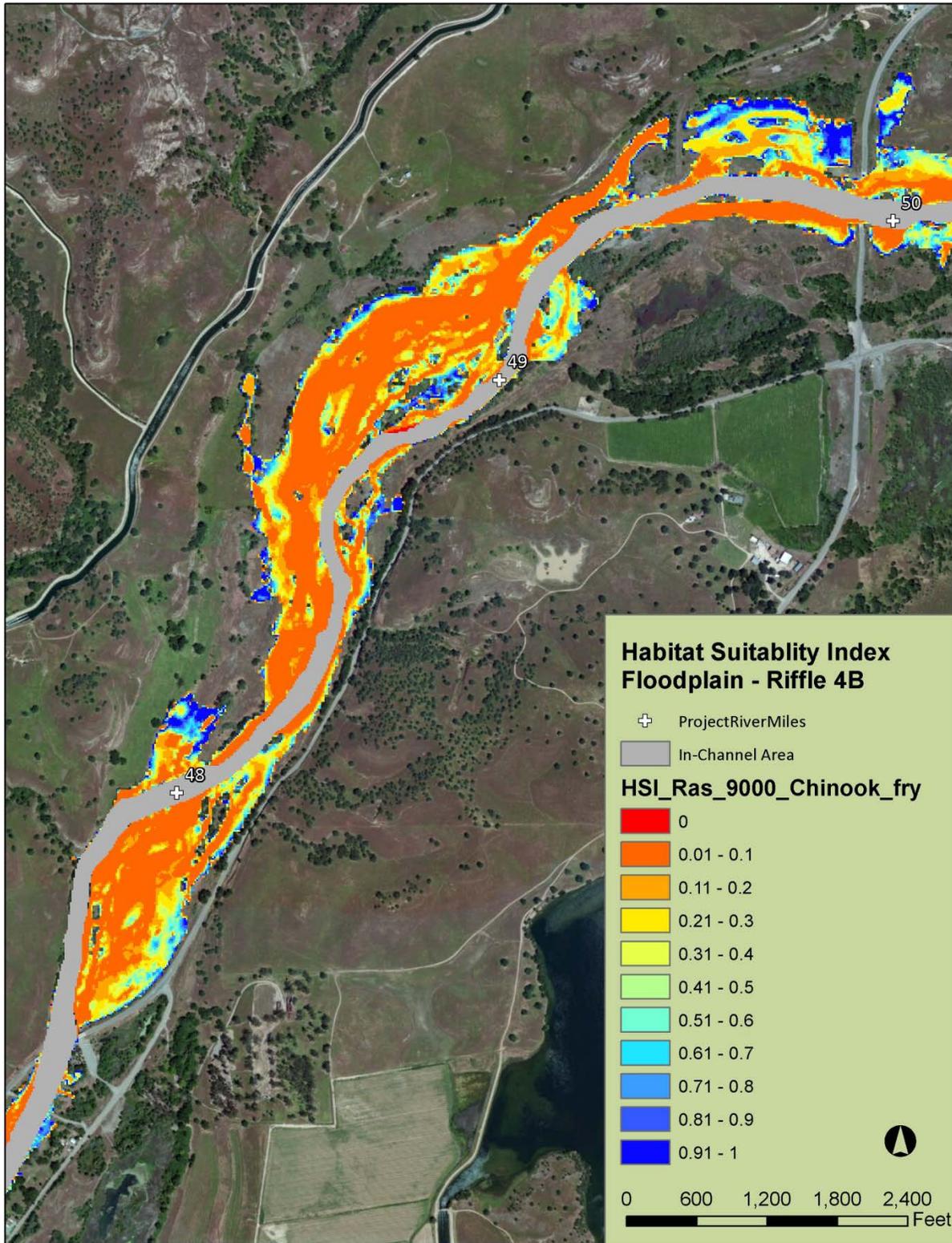
**Figure 6. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



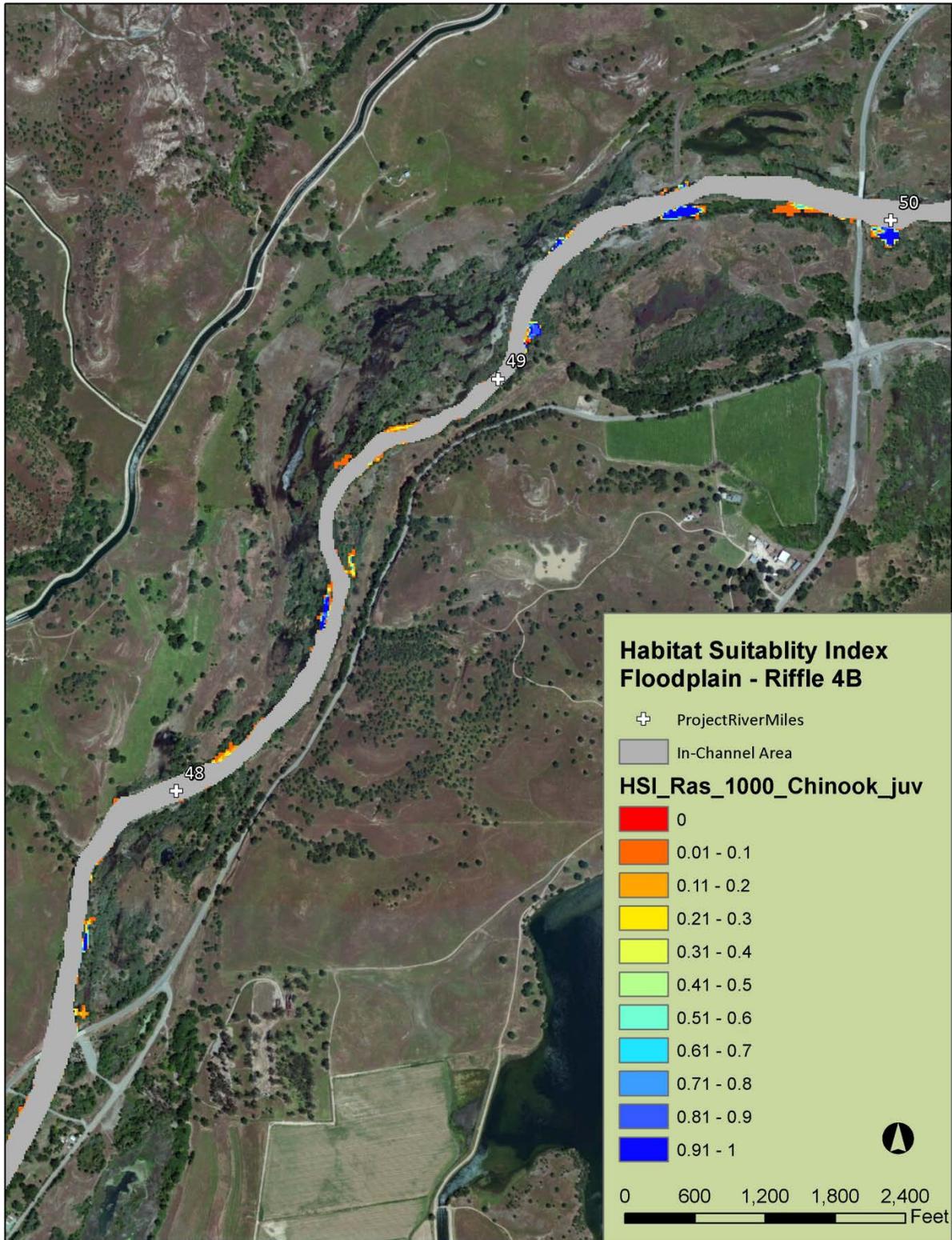
**Figure 7. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



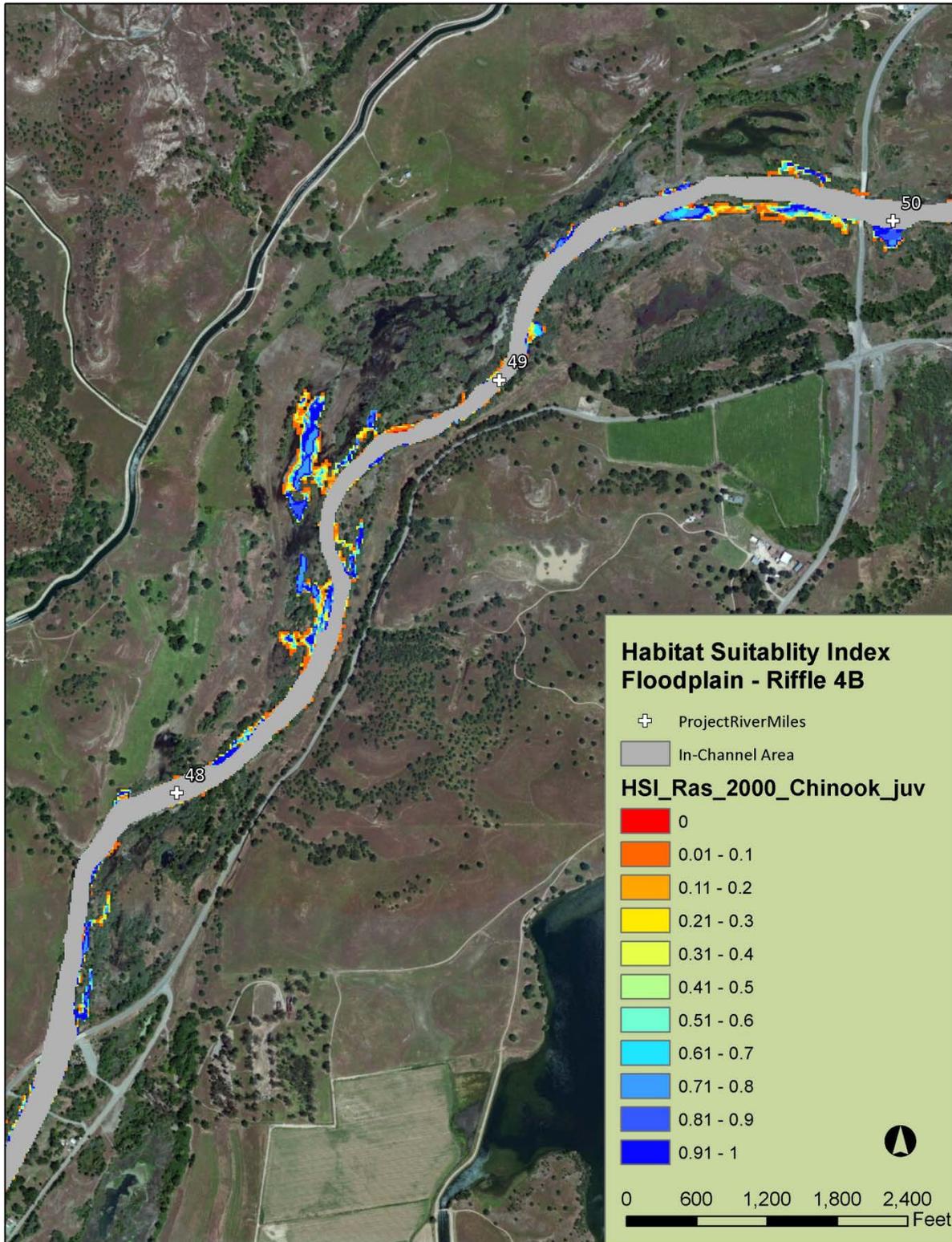
**Figure 8. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



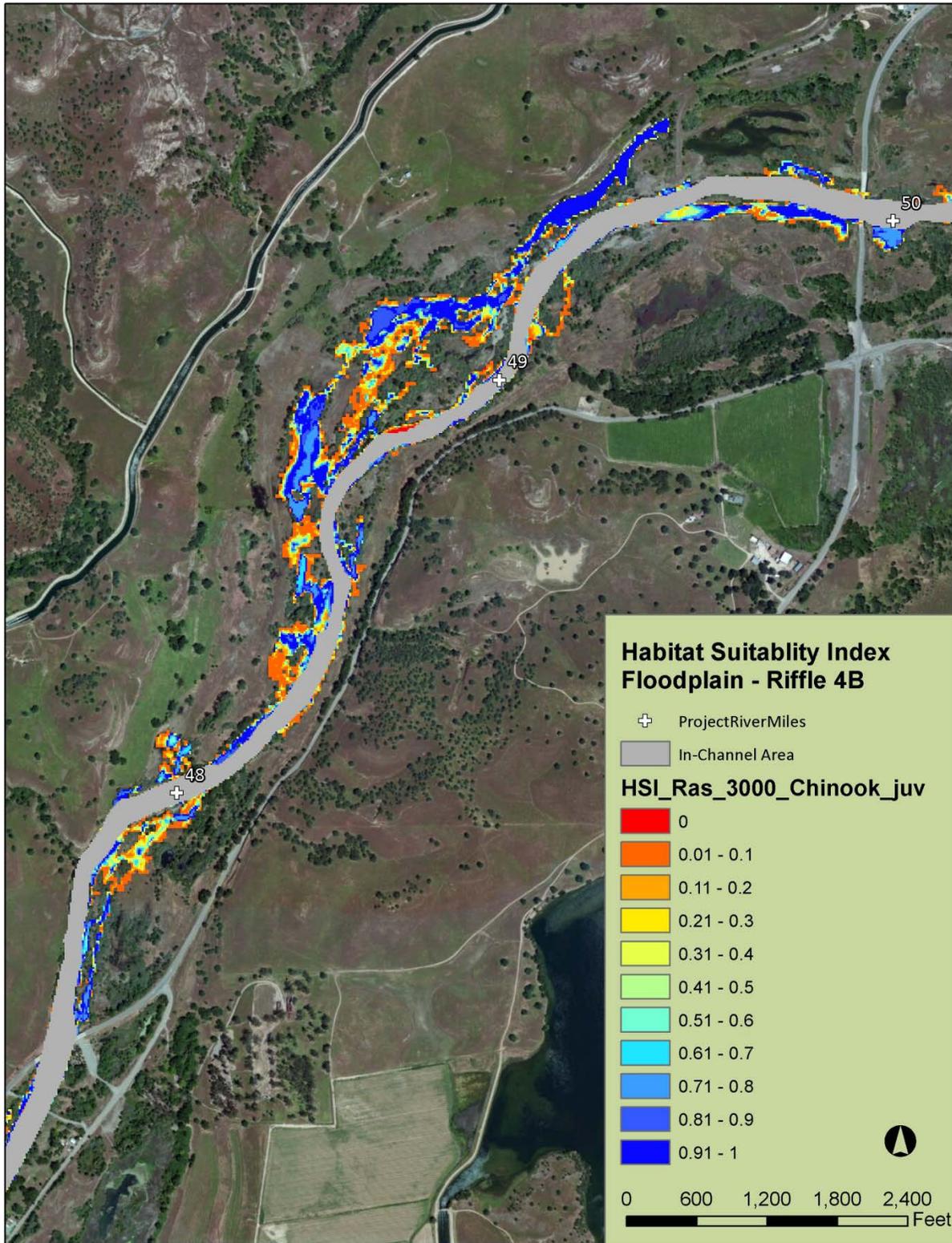
**Figure 9. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



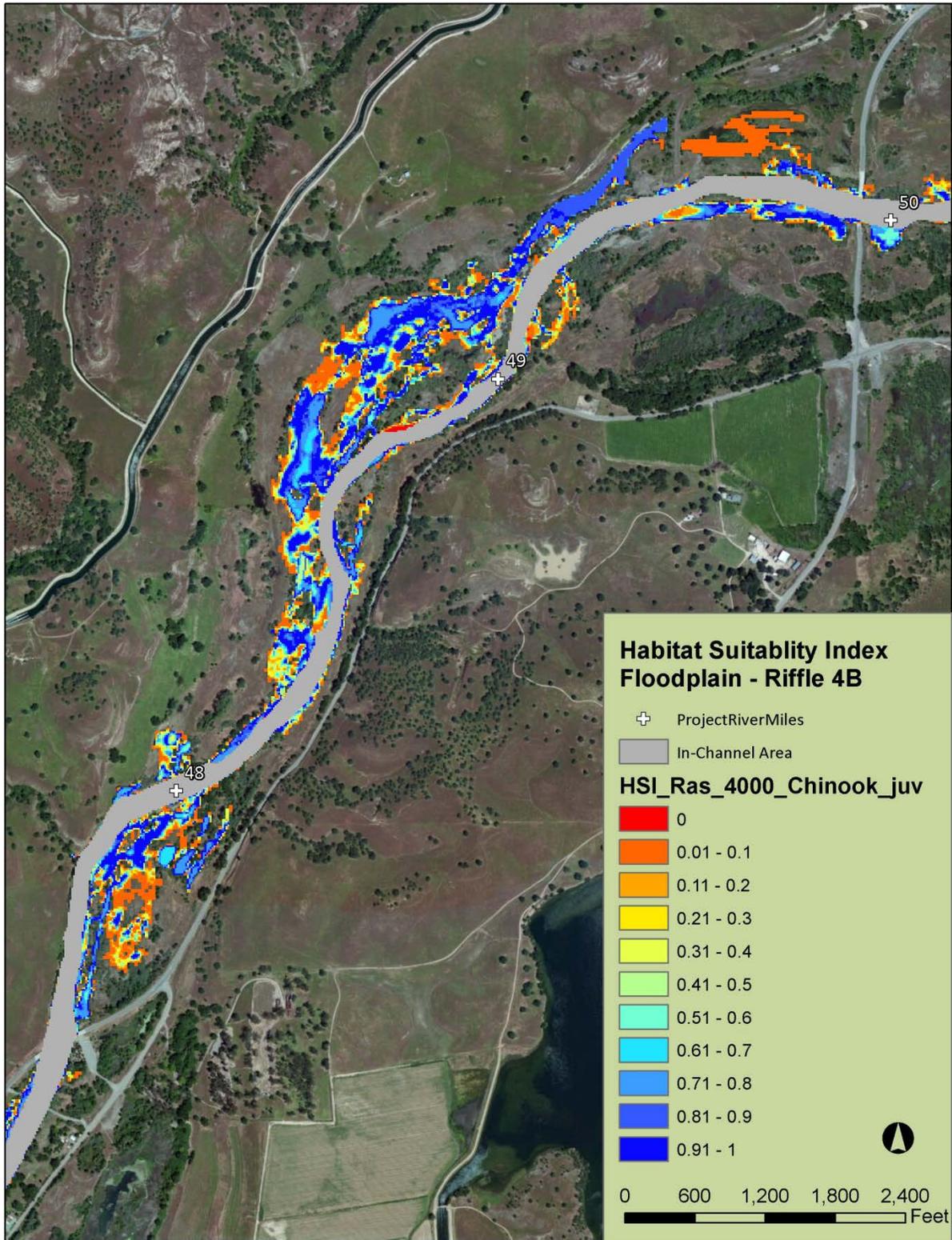
**Figure 10. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



**Figure 11. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



**Figure 12. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



**Figure 13. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**

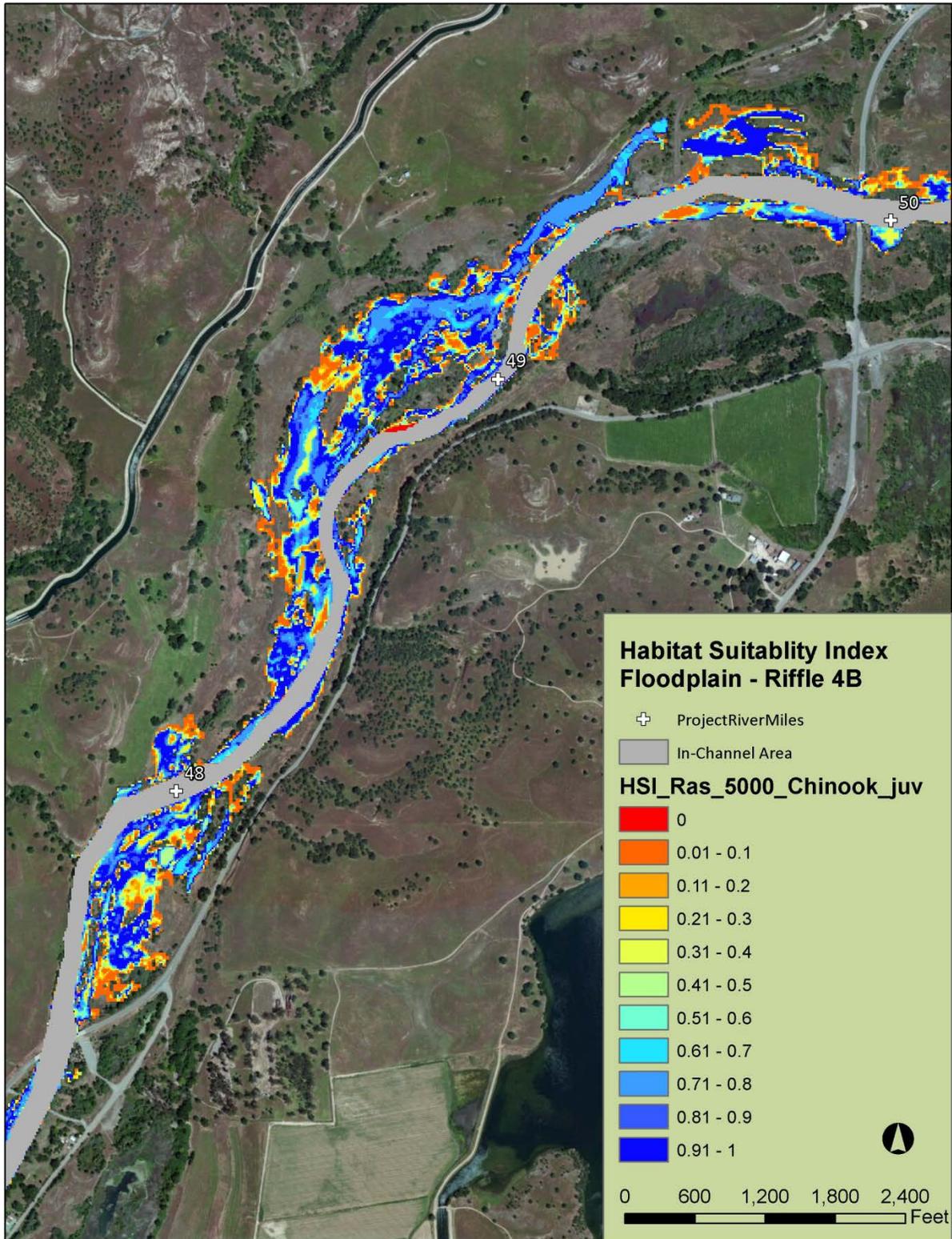
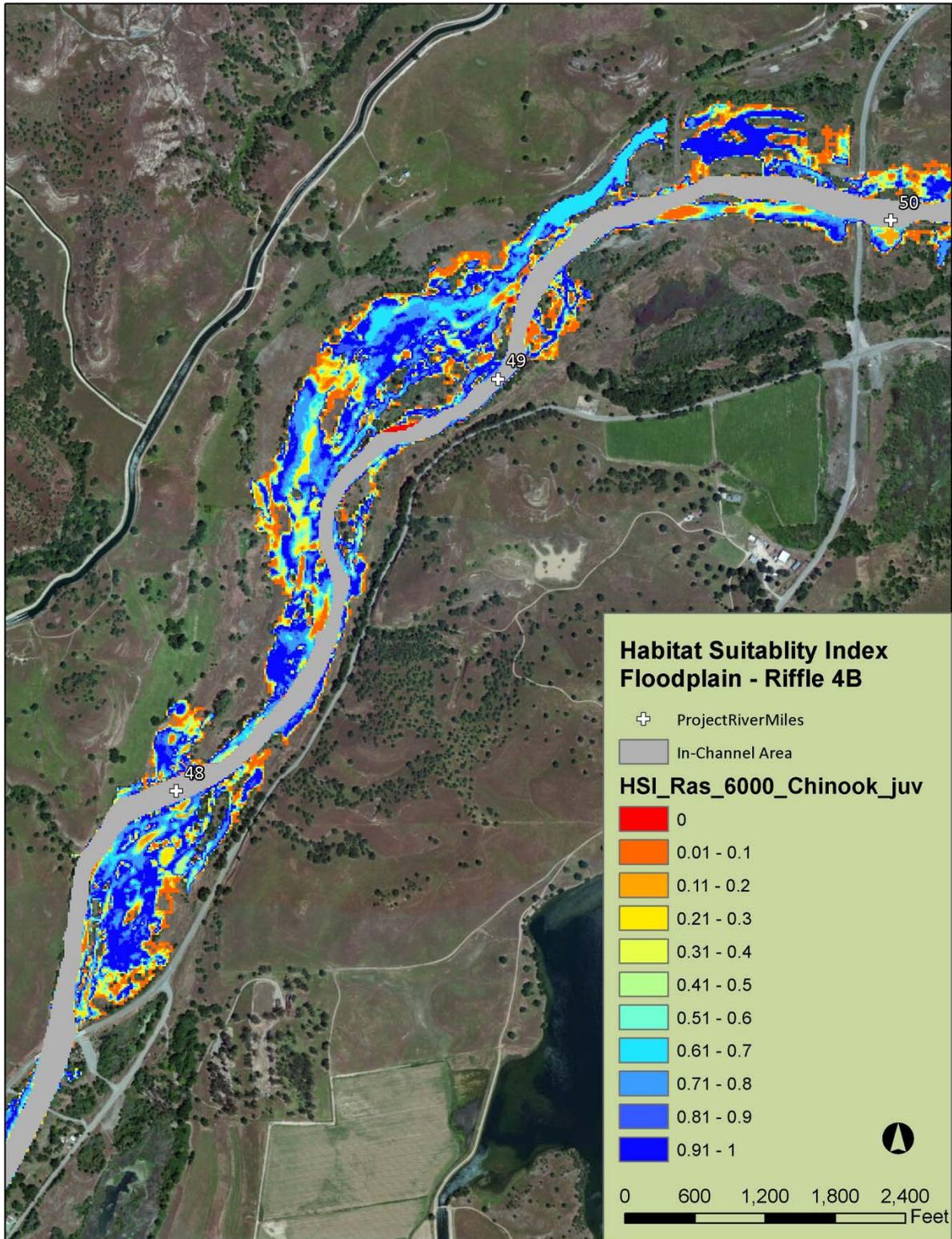
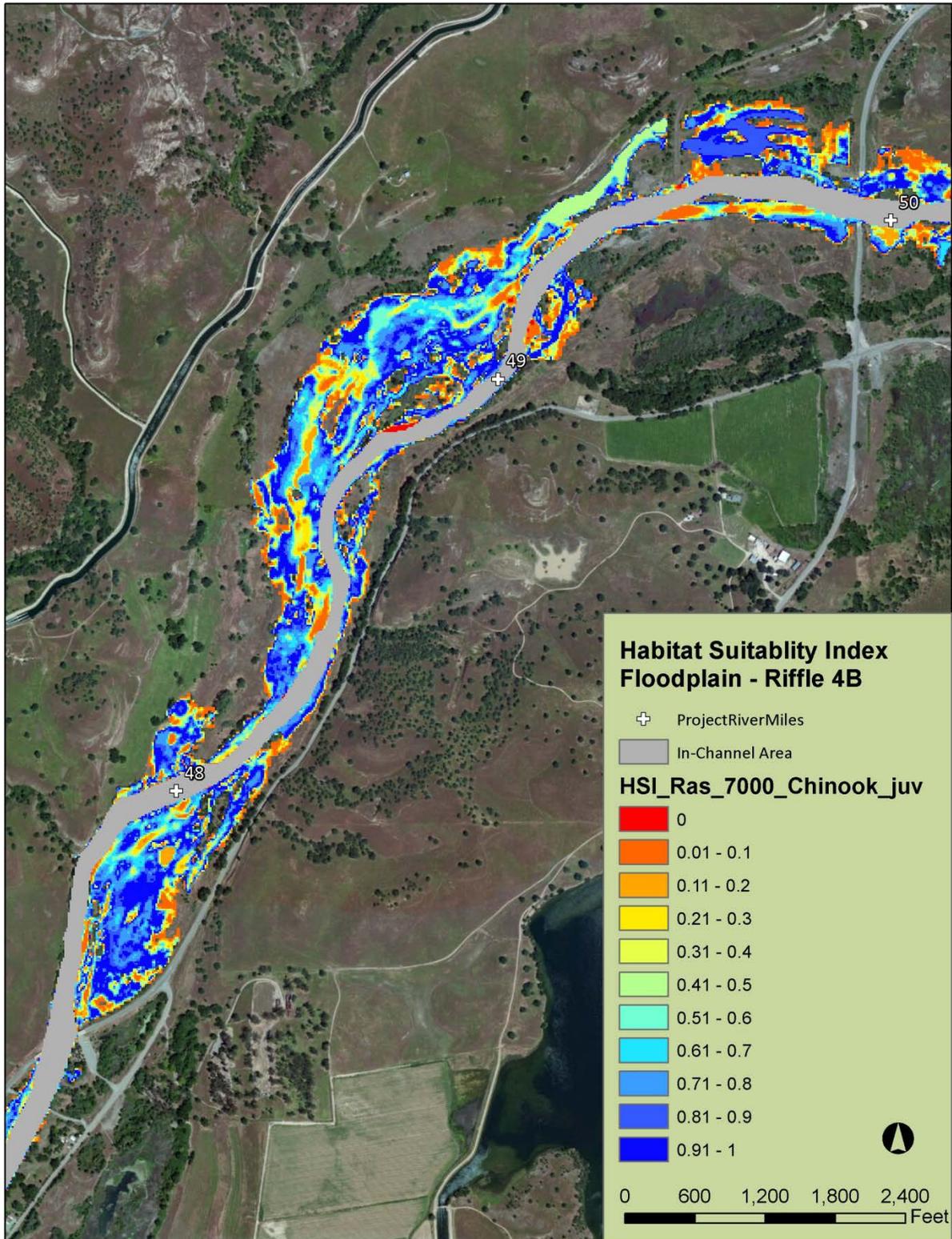


Figure 14. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.



**Figure 15. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



**Figure 16. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**

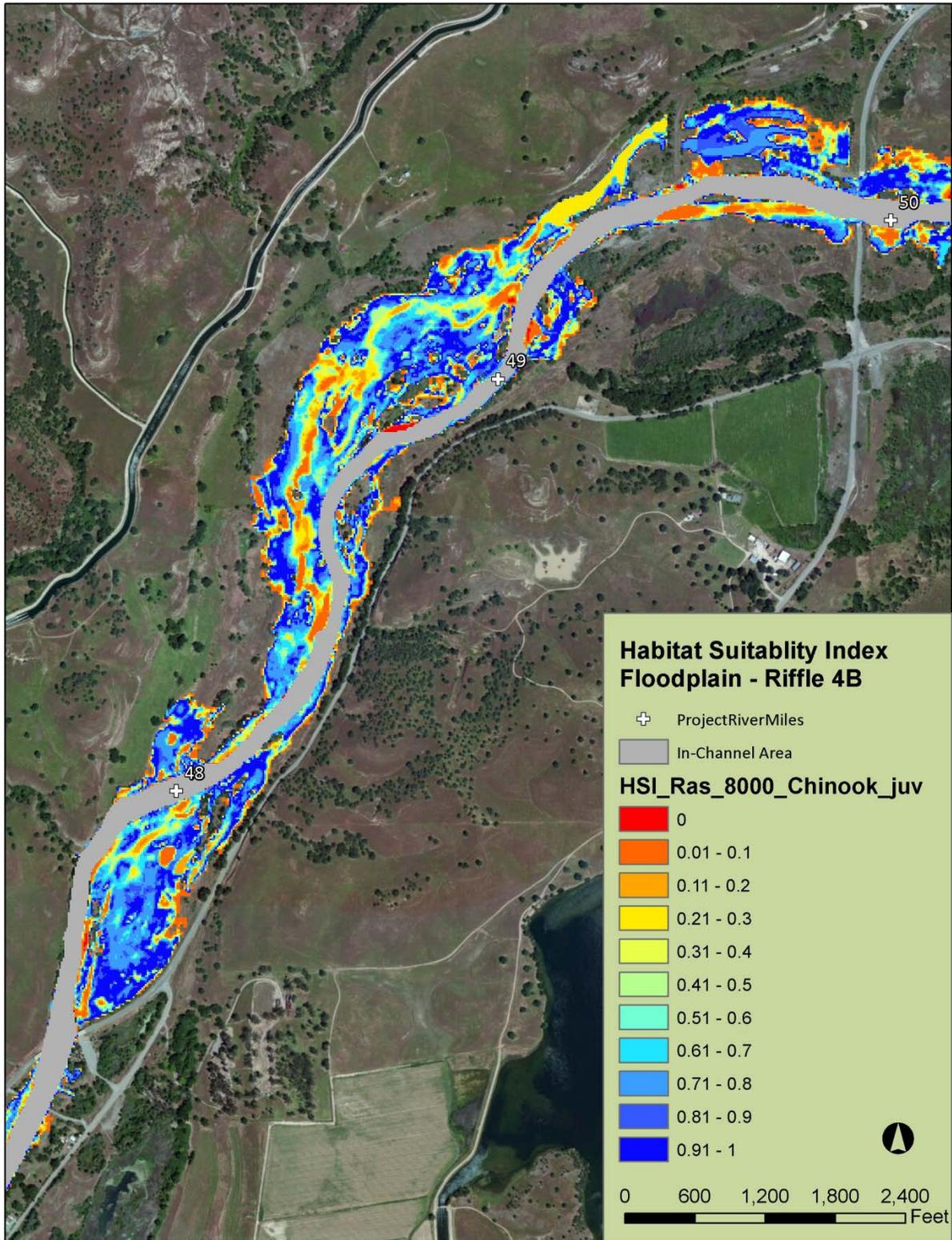
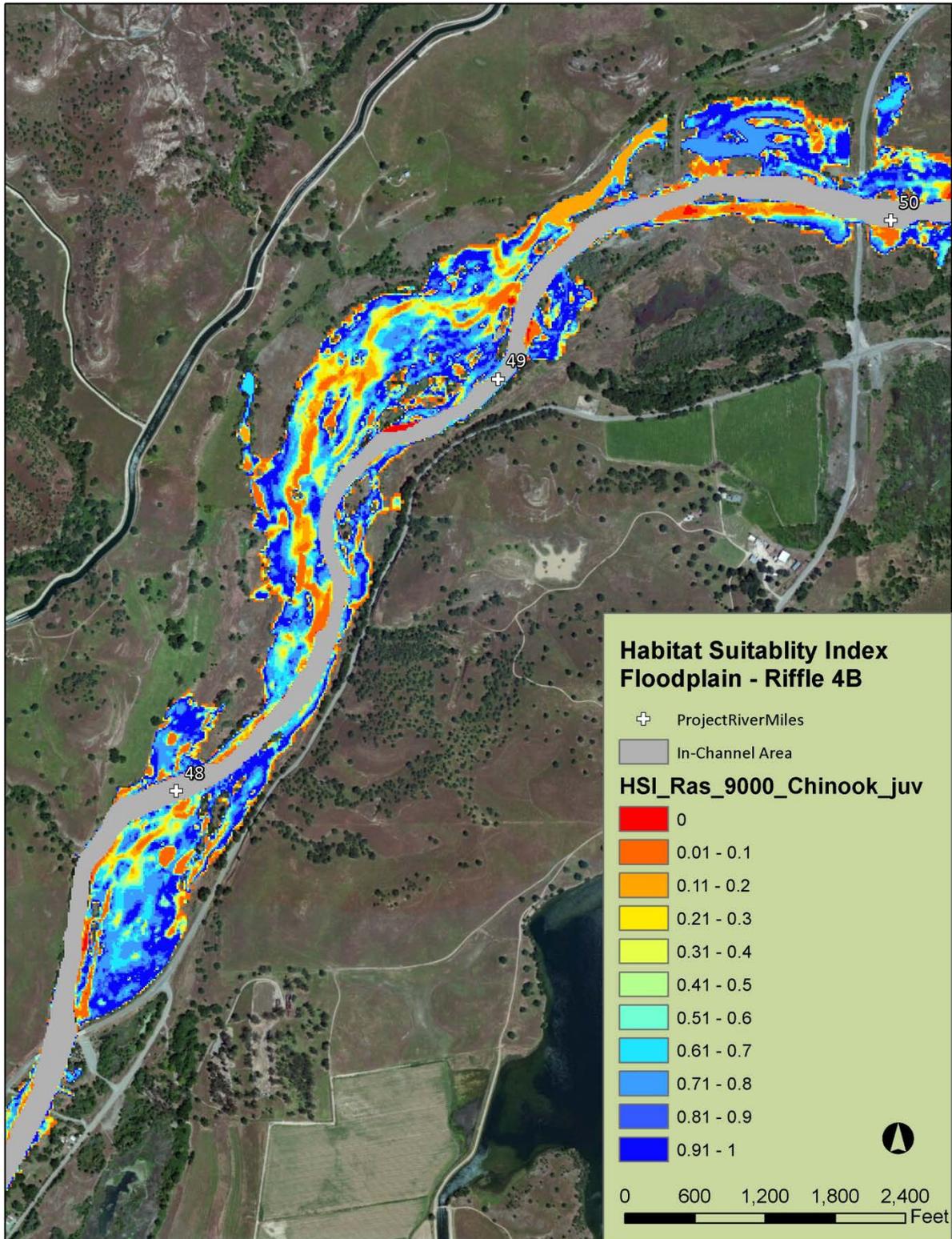
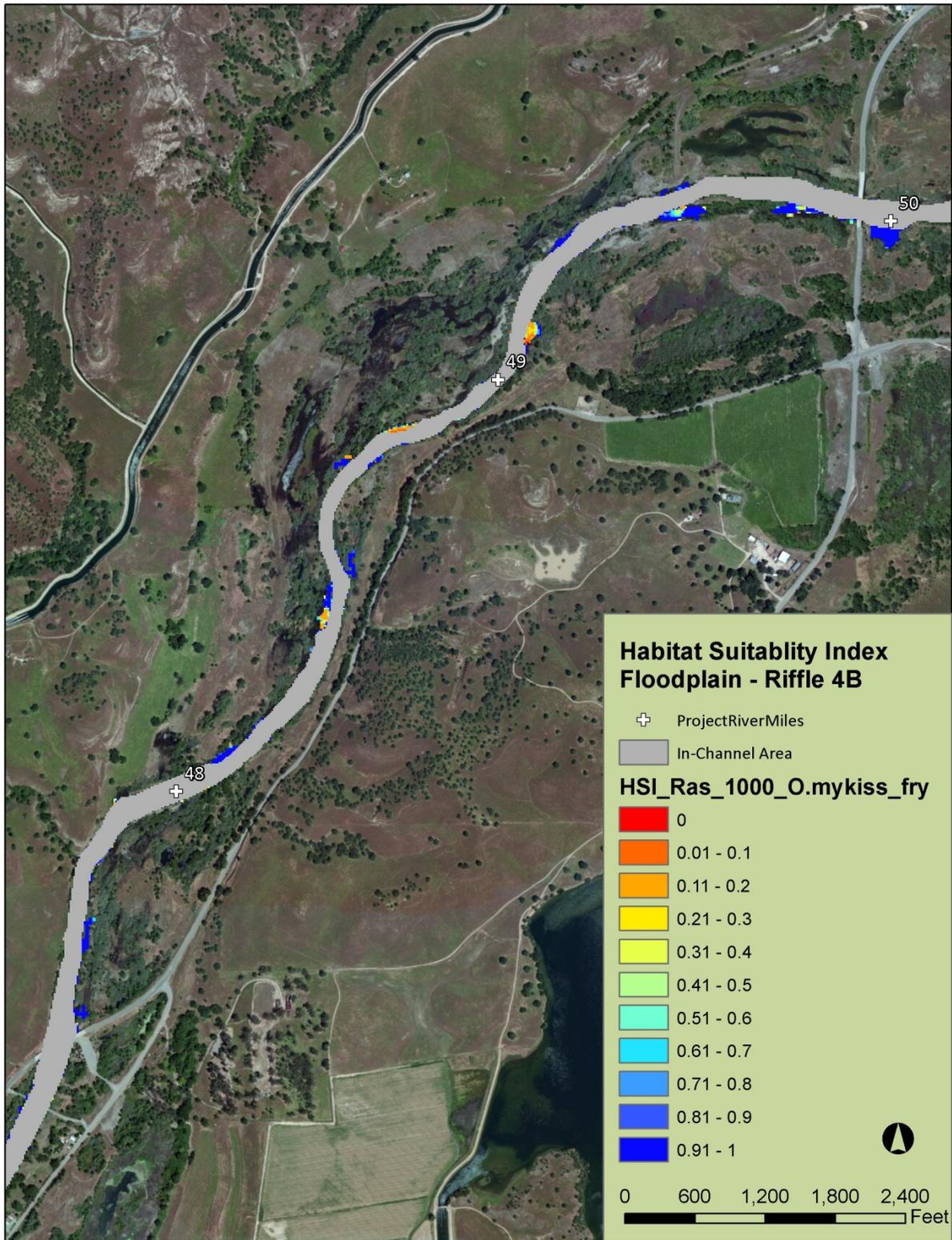


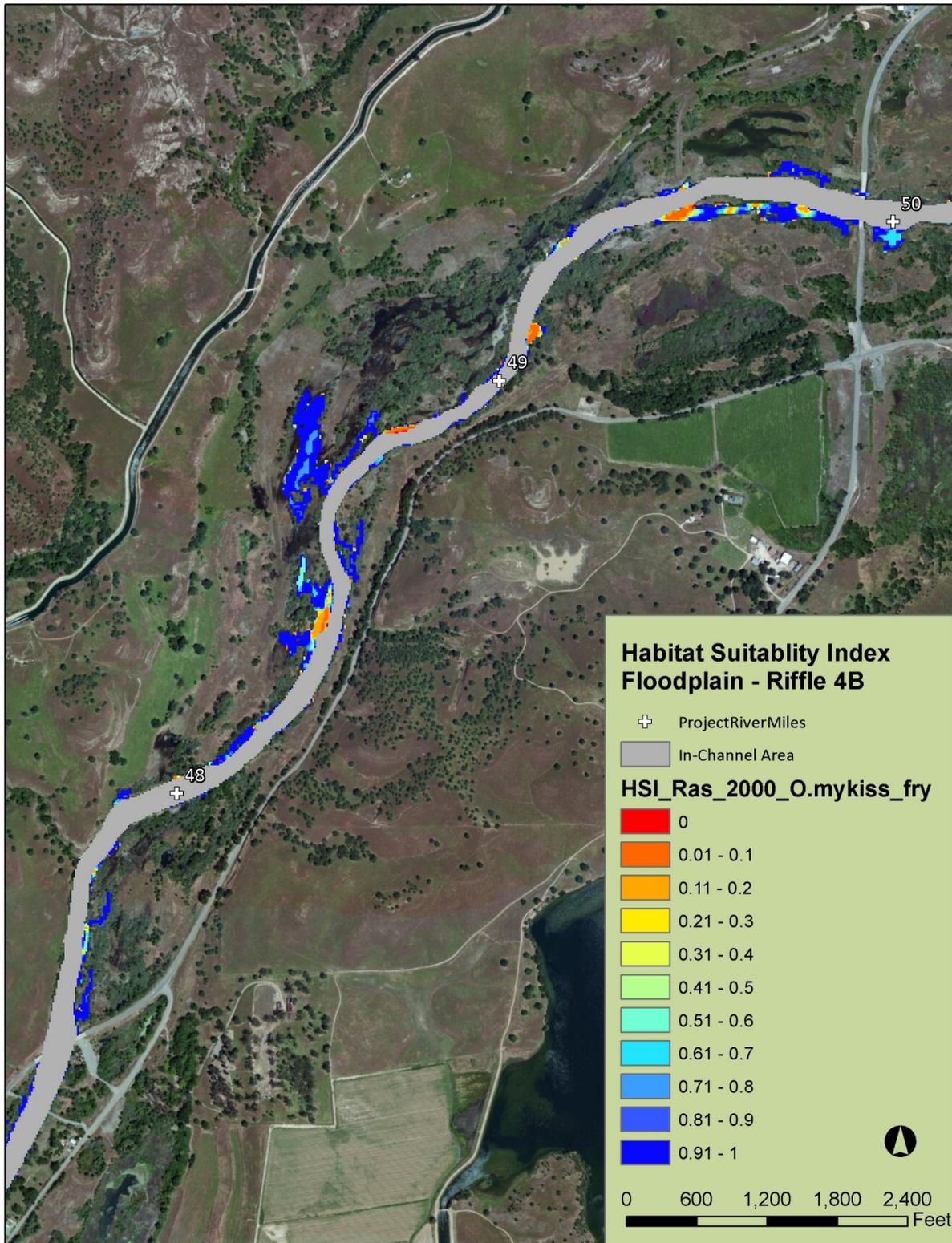
Figure 17. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.



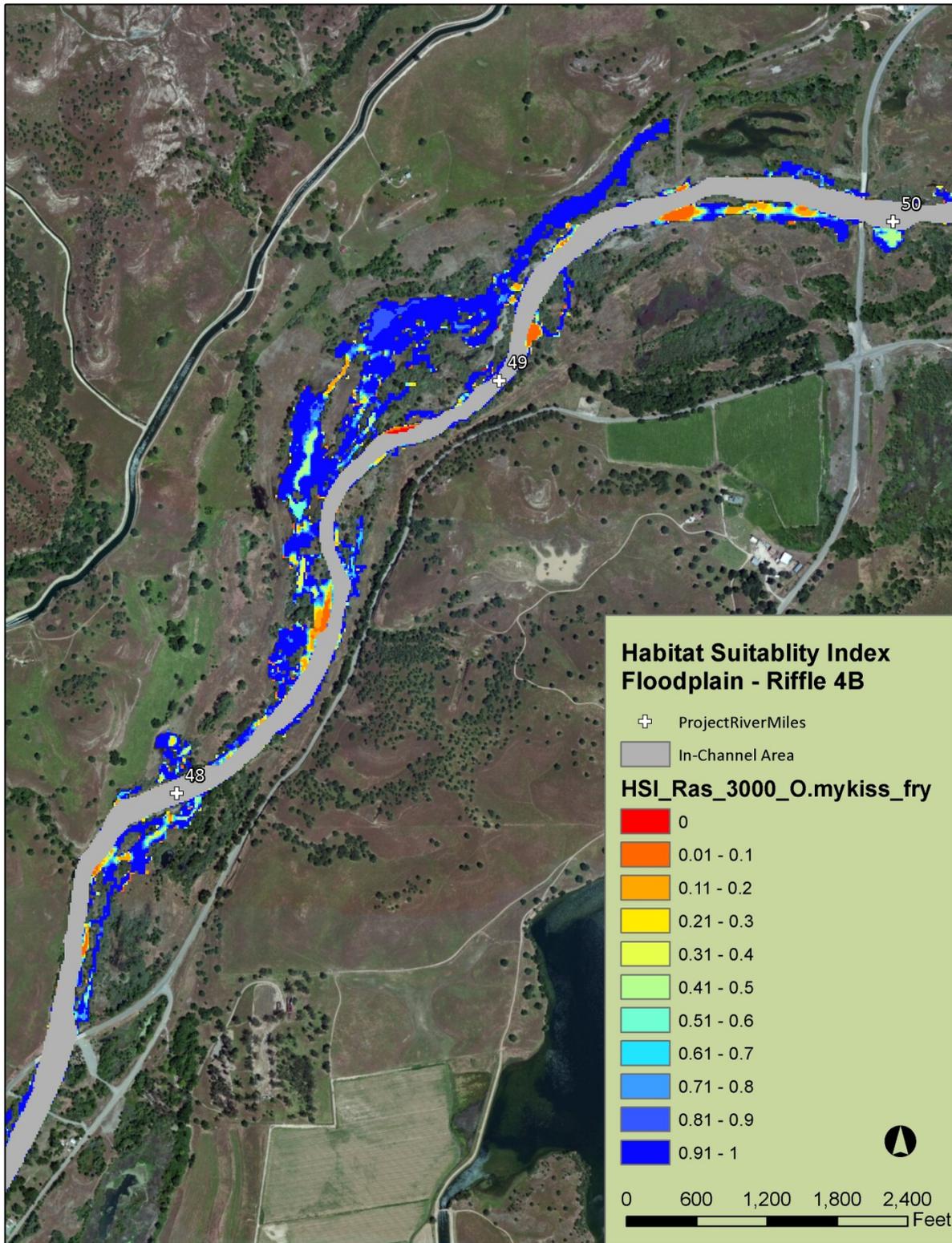
**Figure 18. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



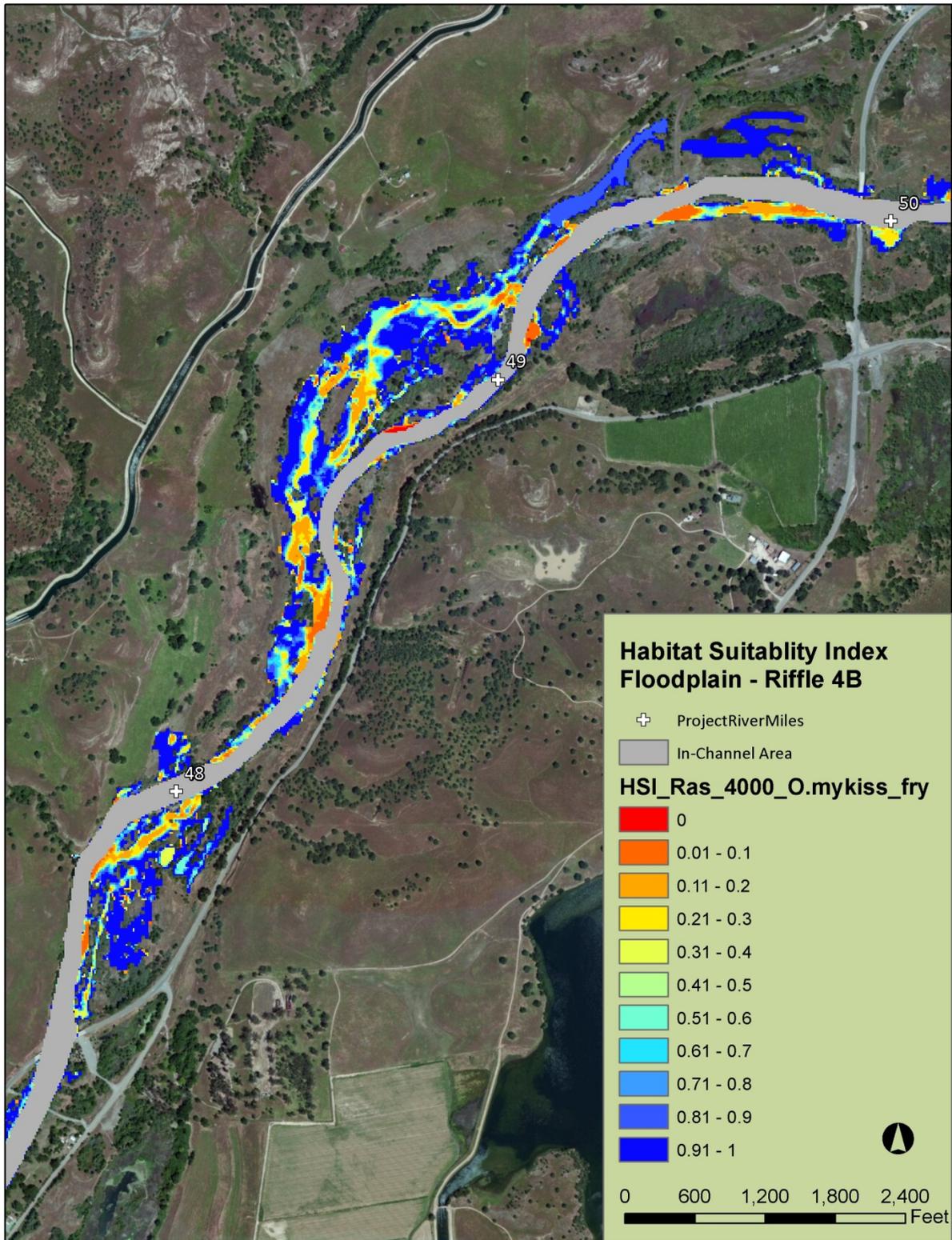
**Figure 19. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



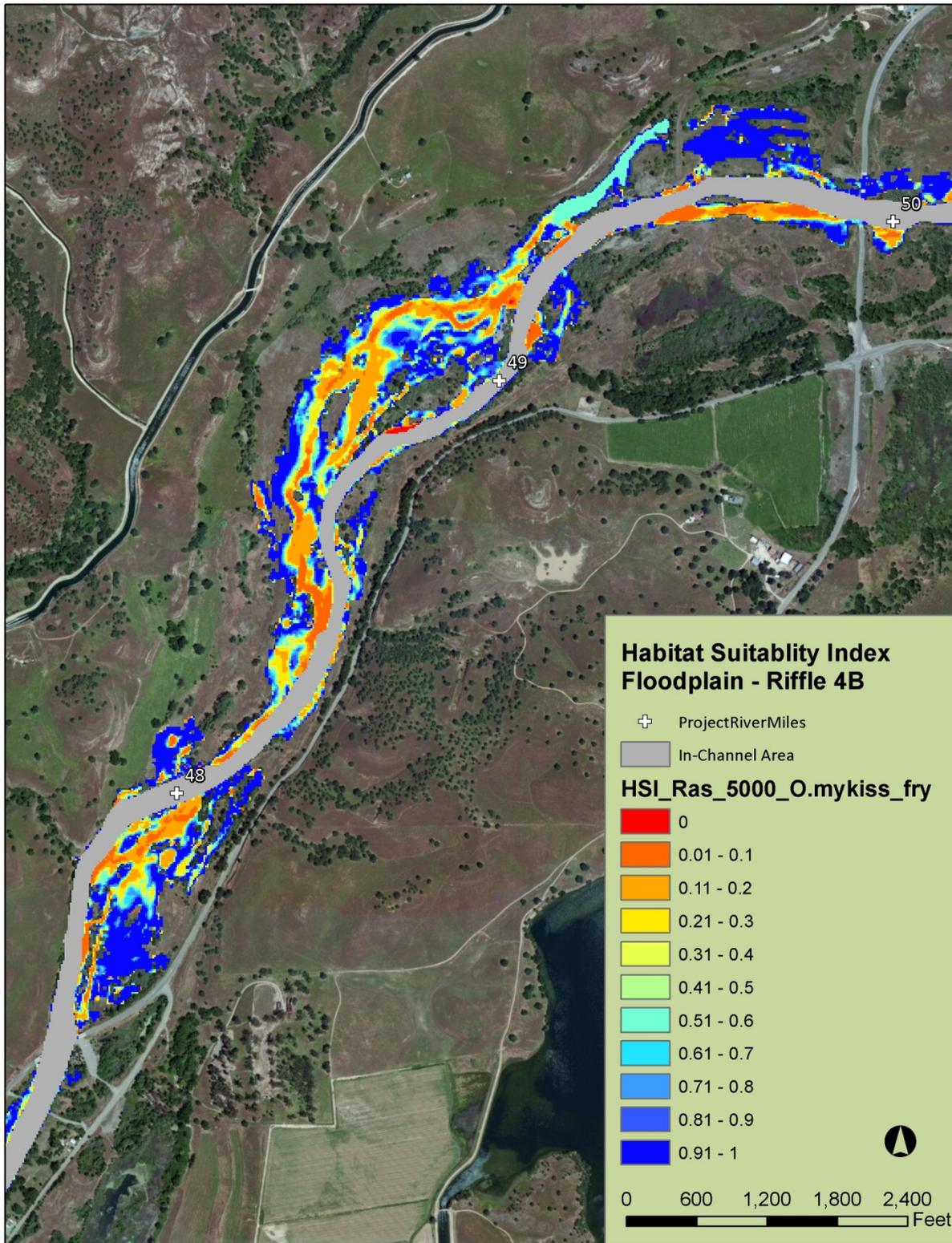
**Figure 20. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



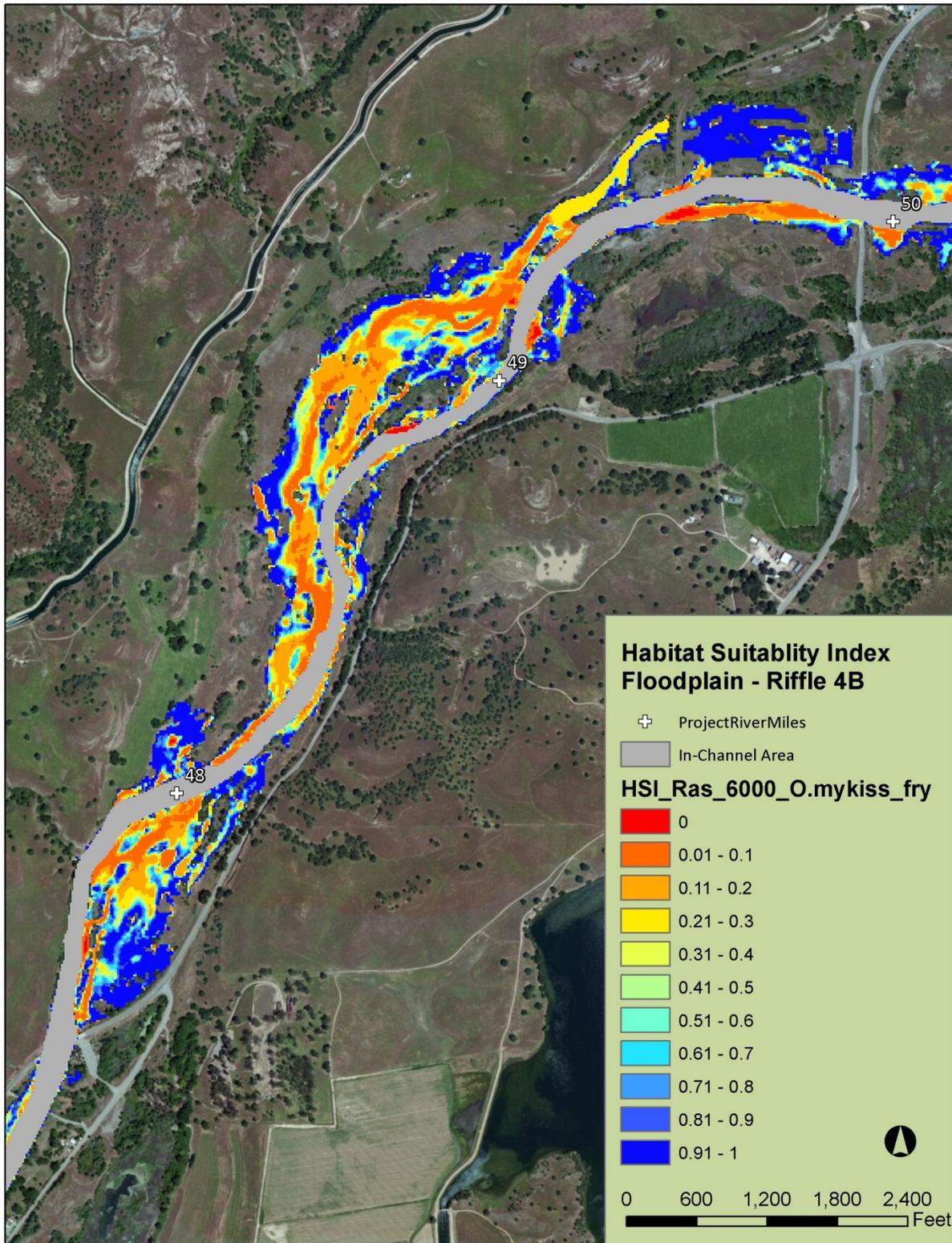
**Figure 21. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



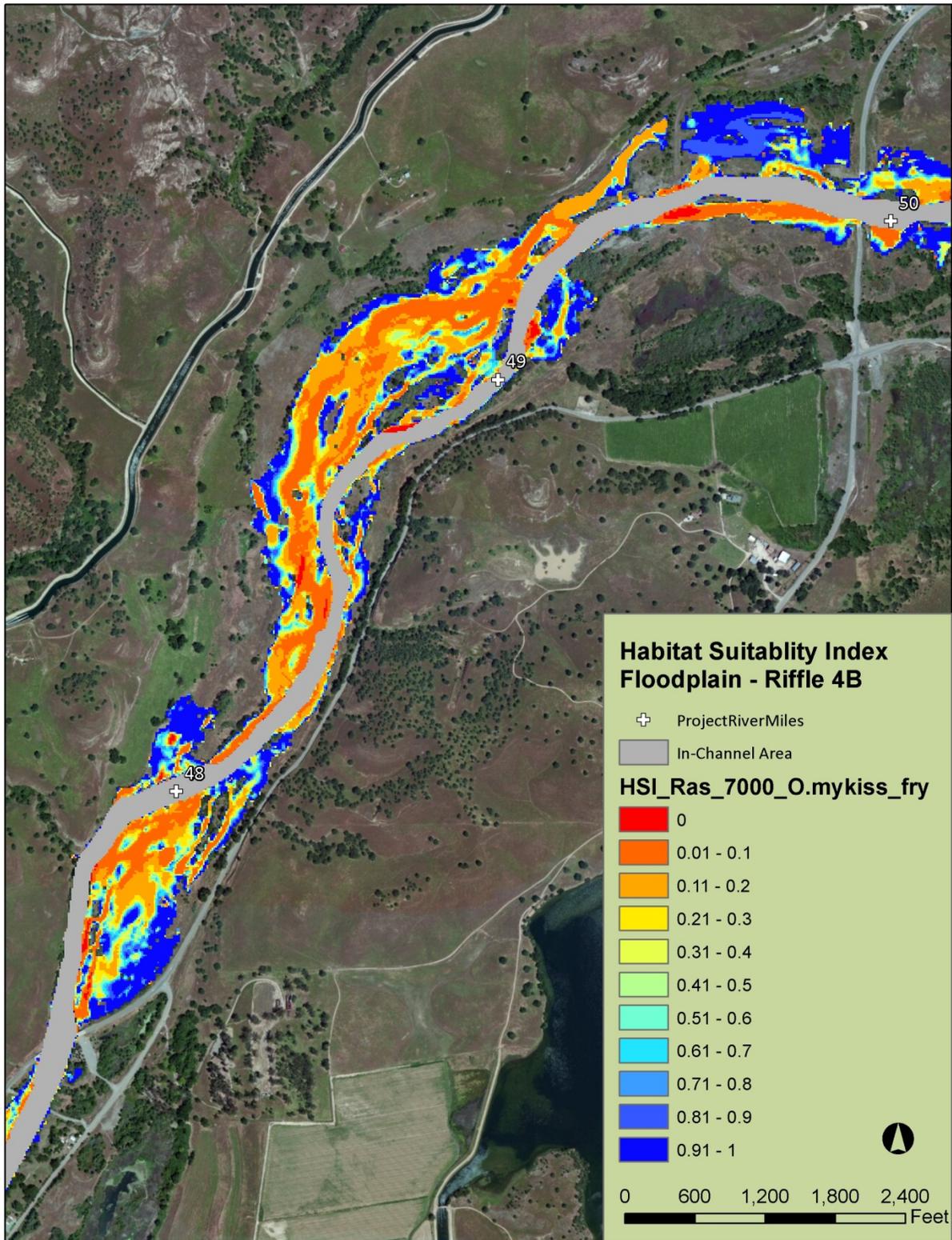
**Figure 22. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



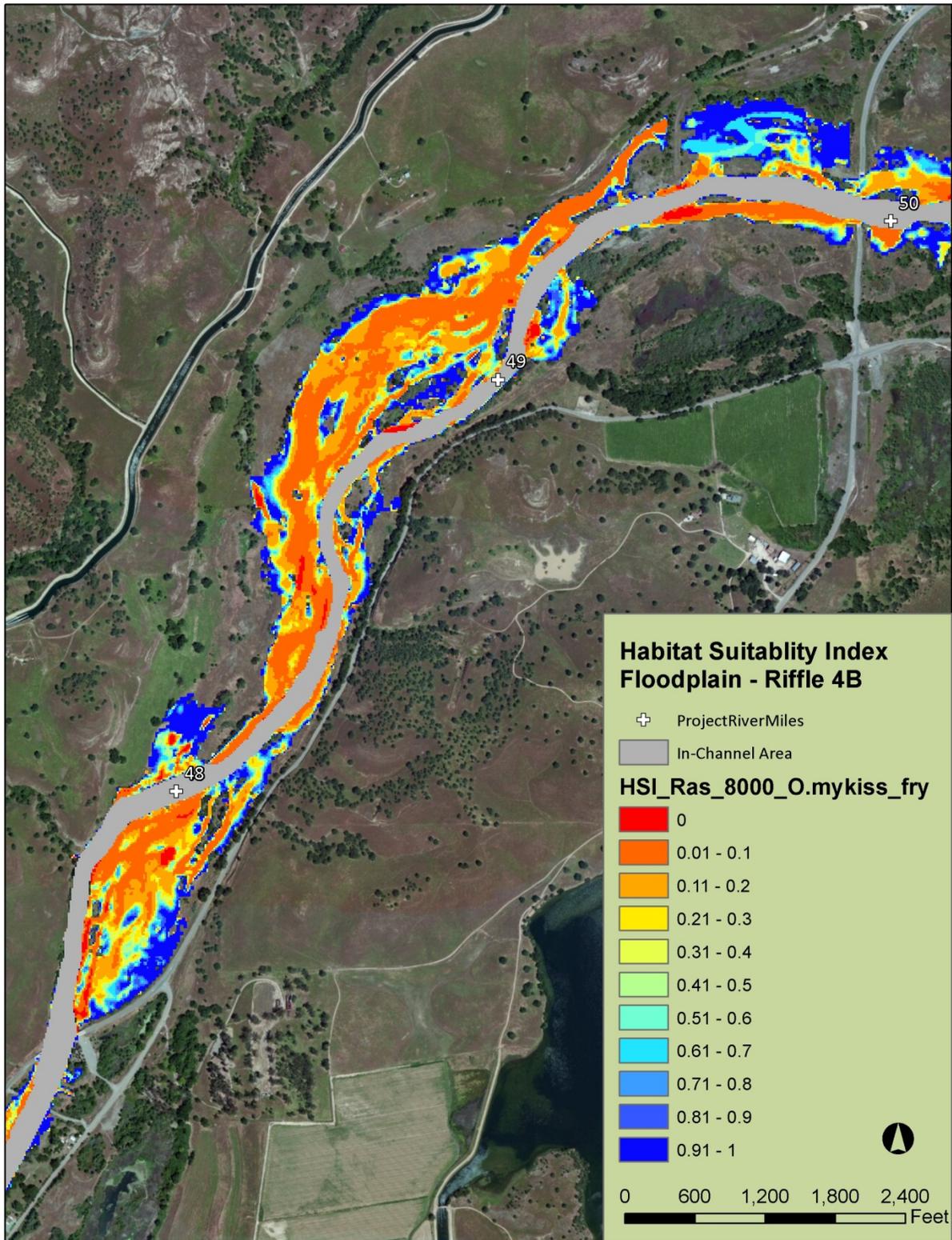
**Figure 23. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



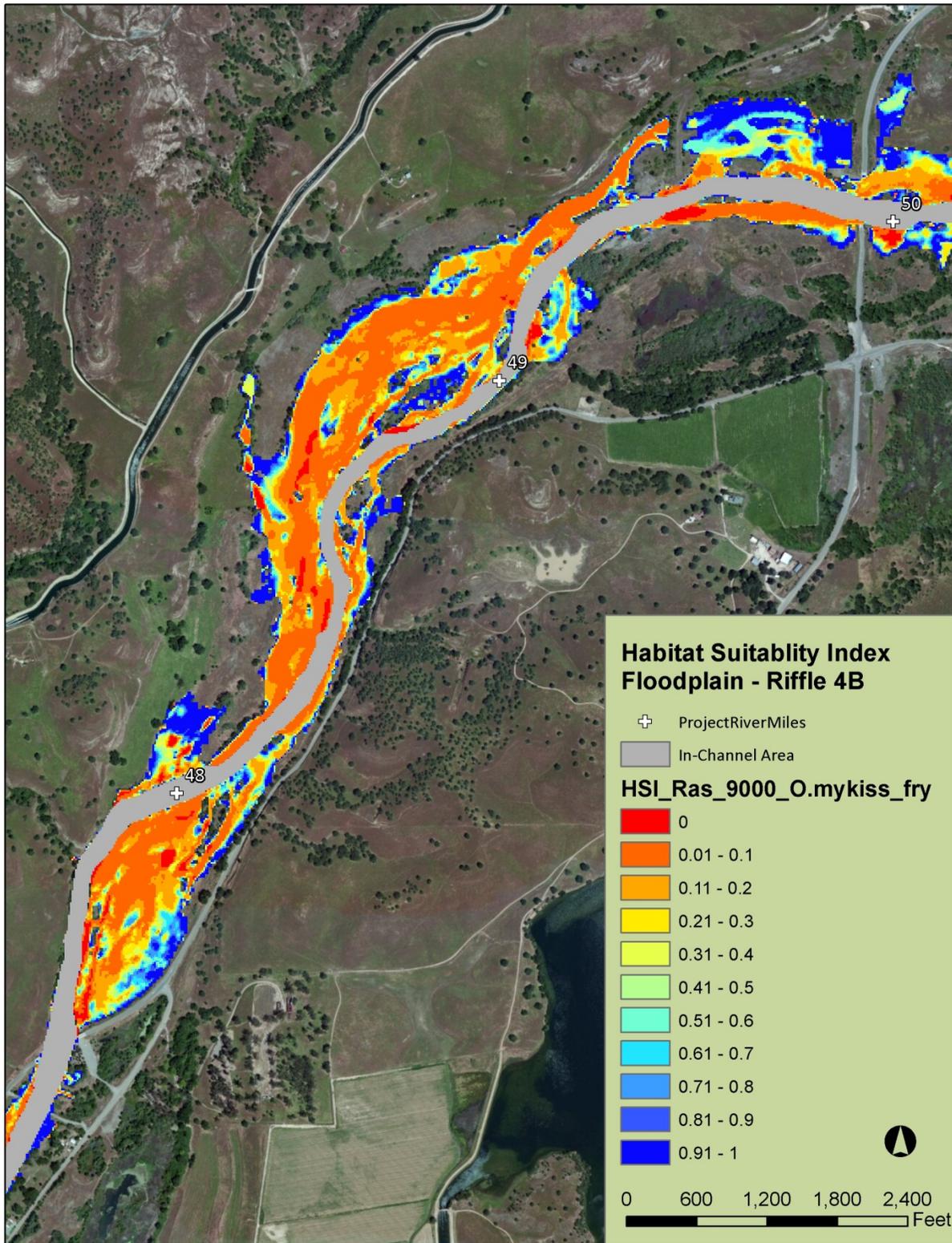
**Figure 24. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



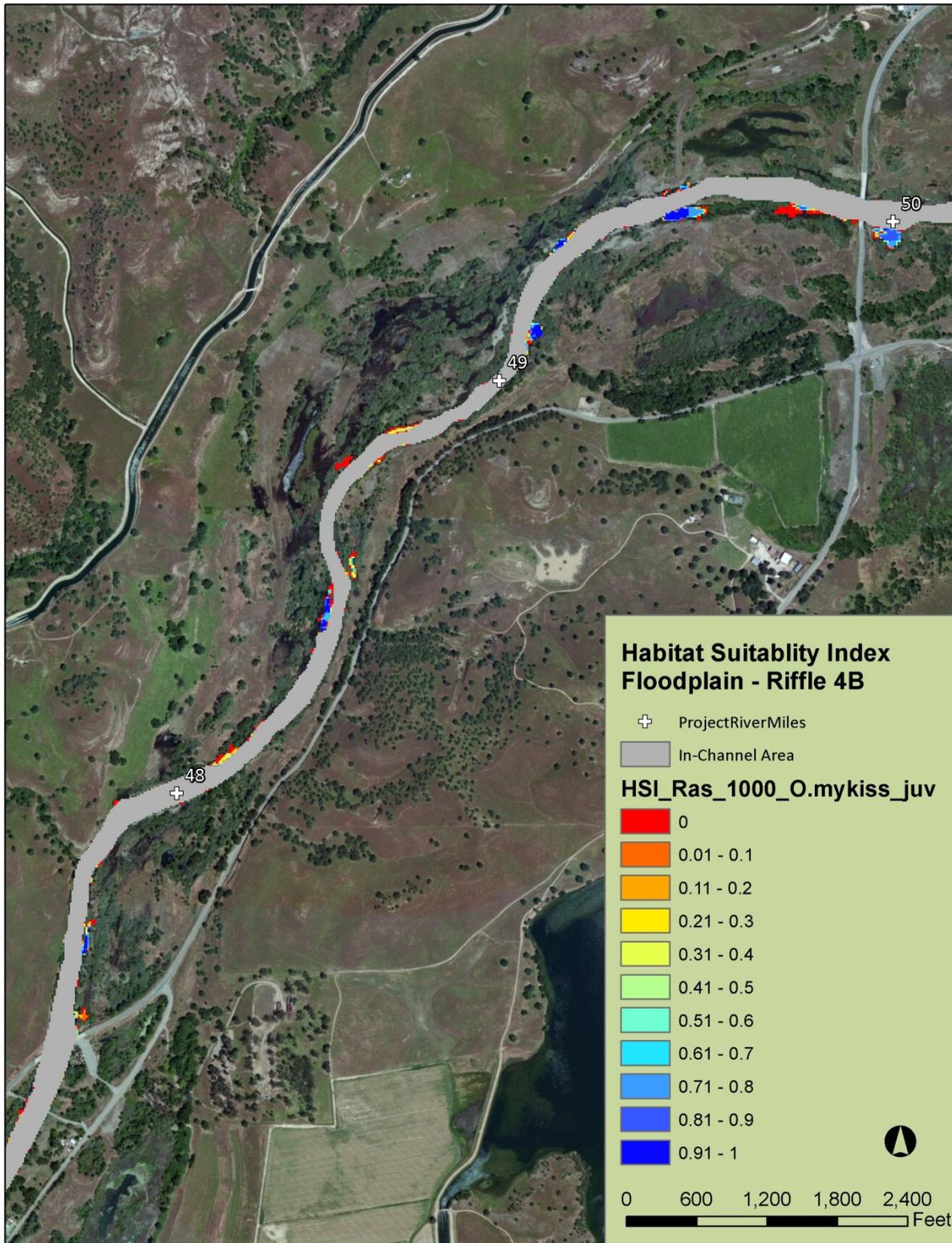
**Figure 25. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



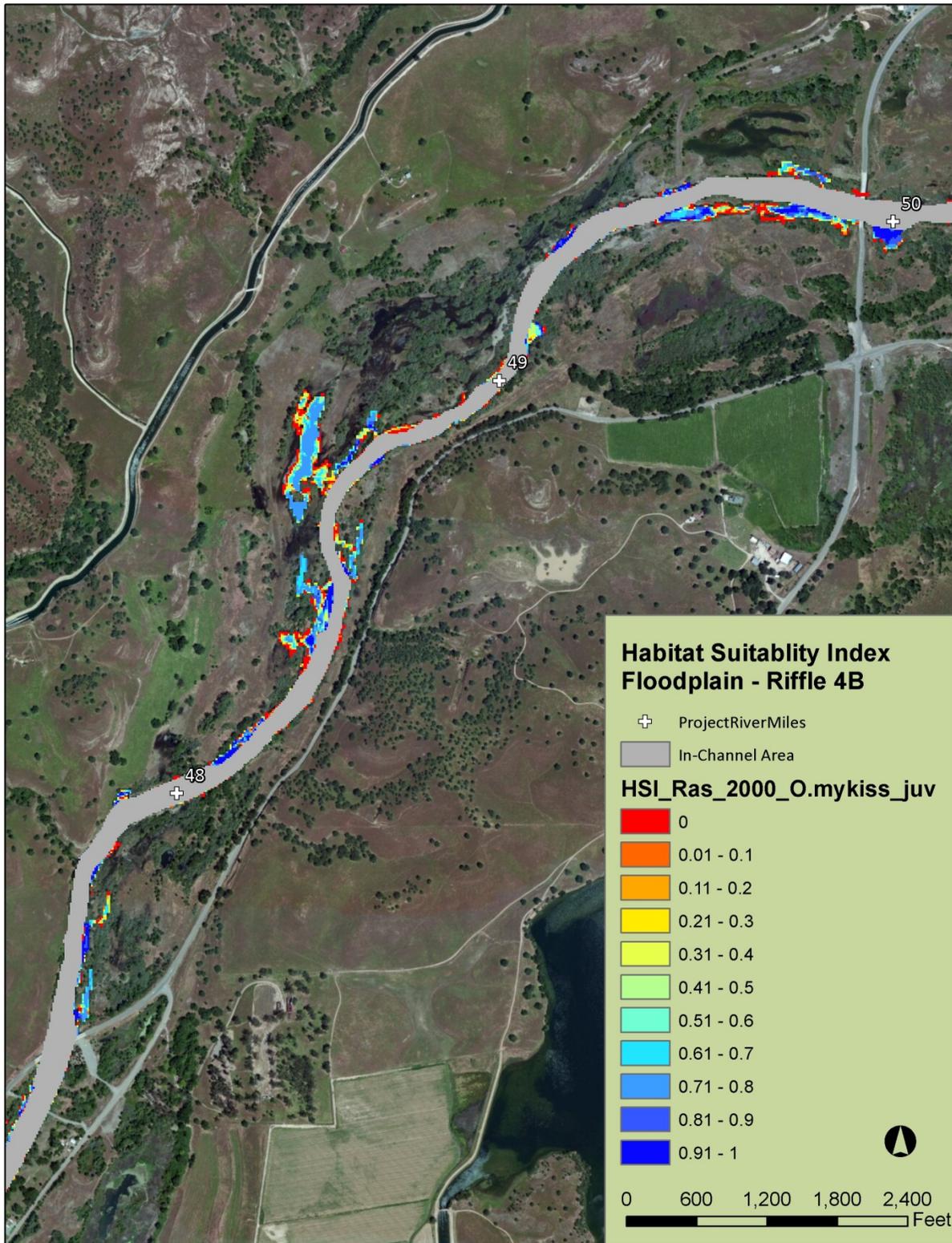
**Figure 26. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



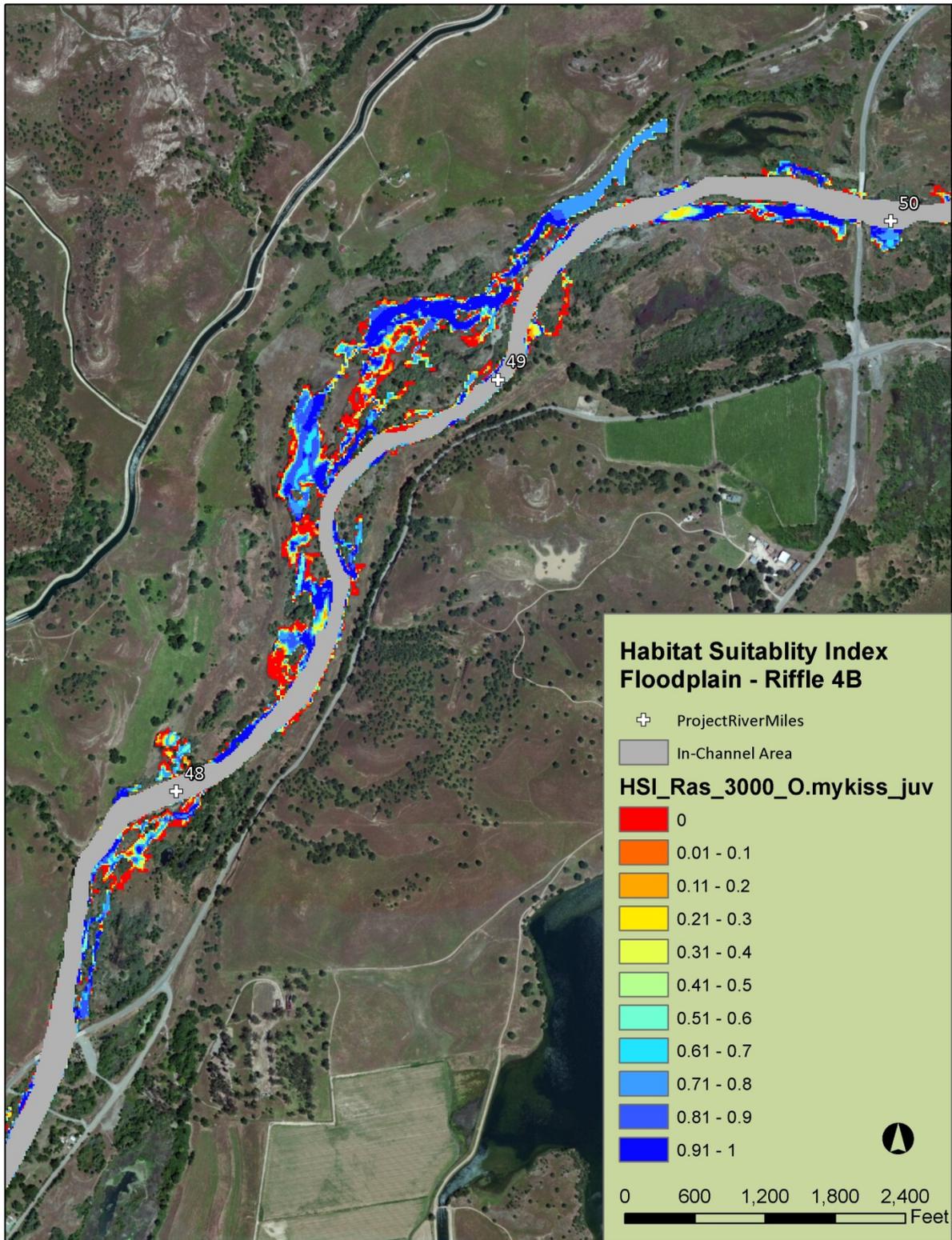
**Figure 27. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



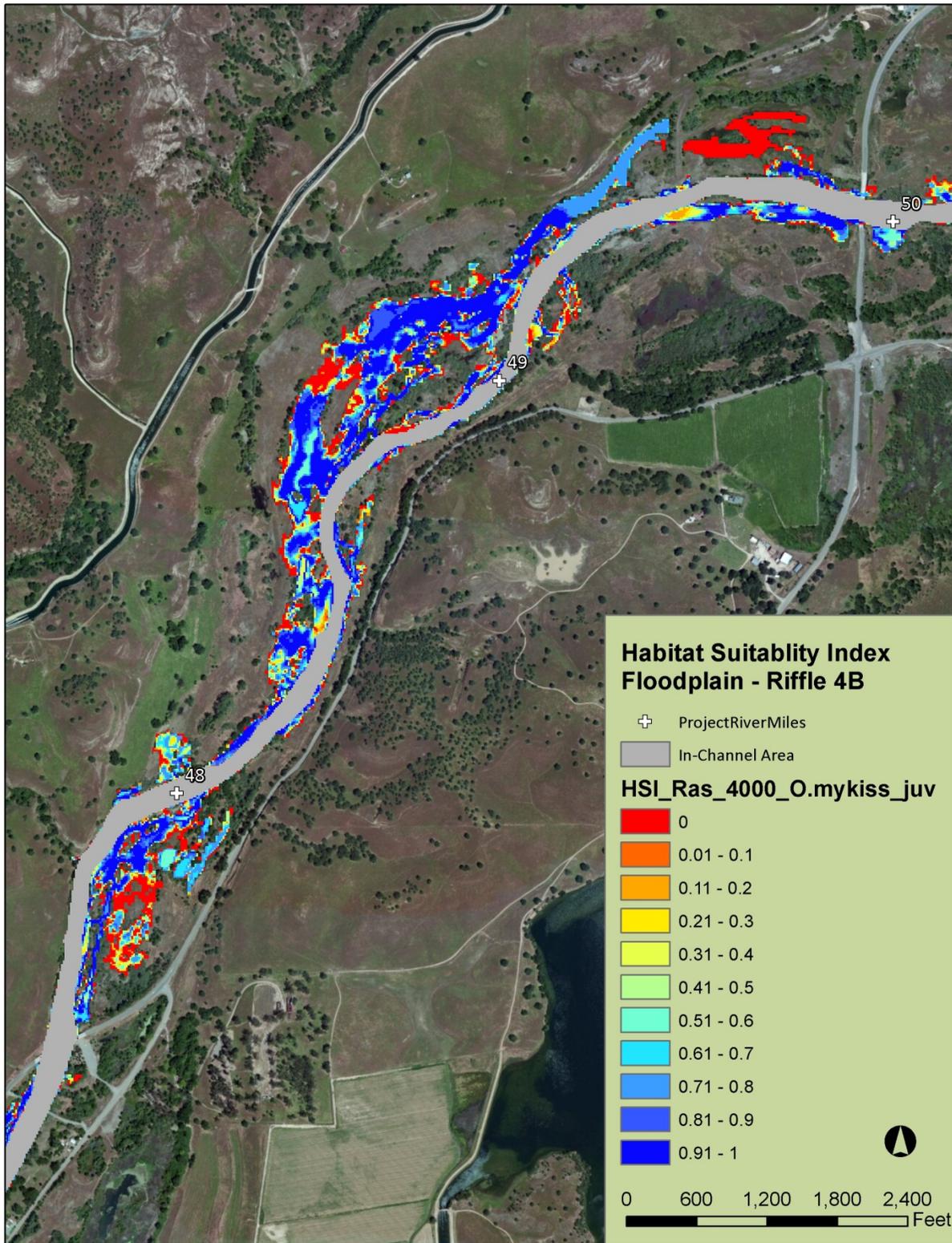
**Figure 28. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



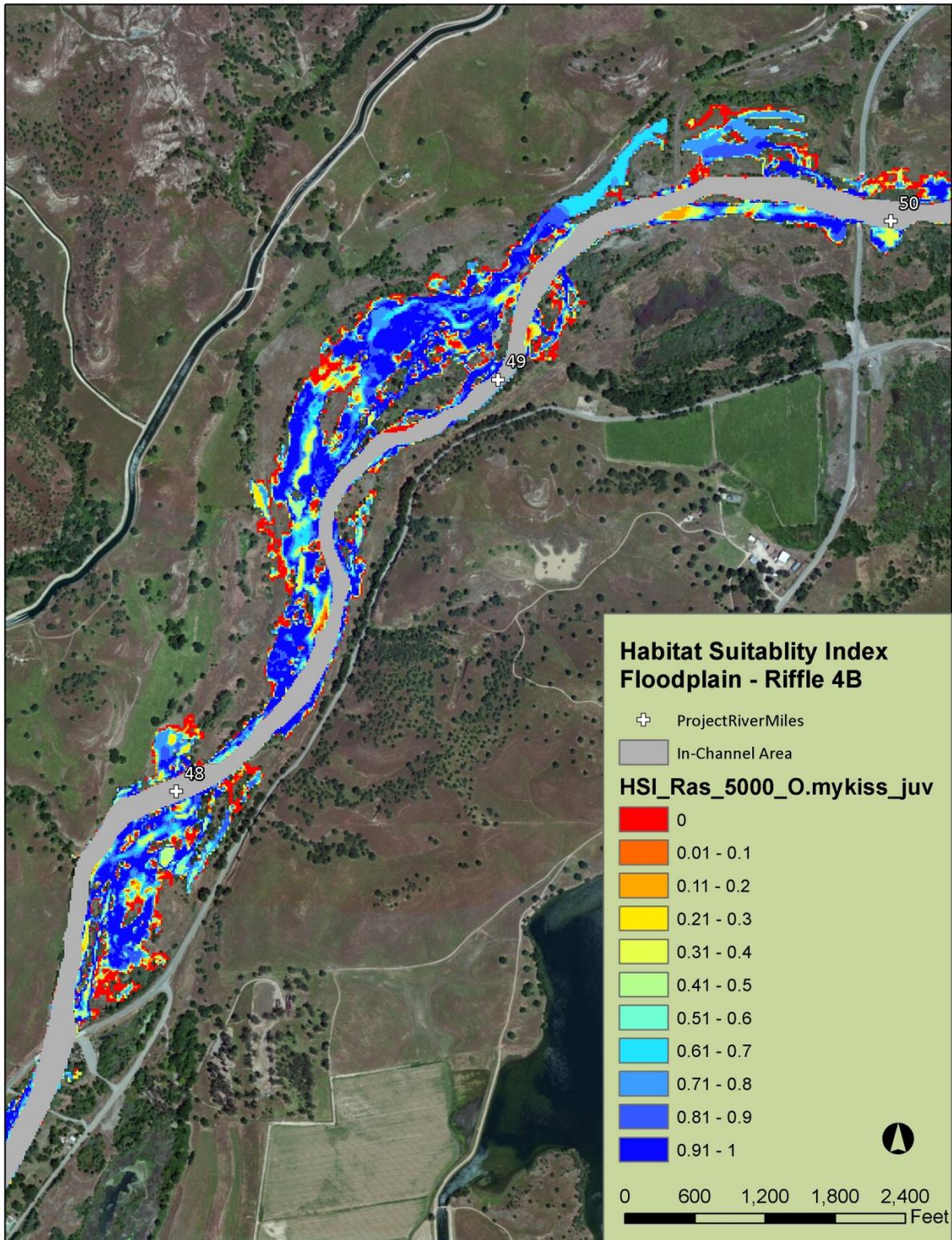
**Figure 29. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



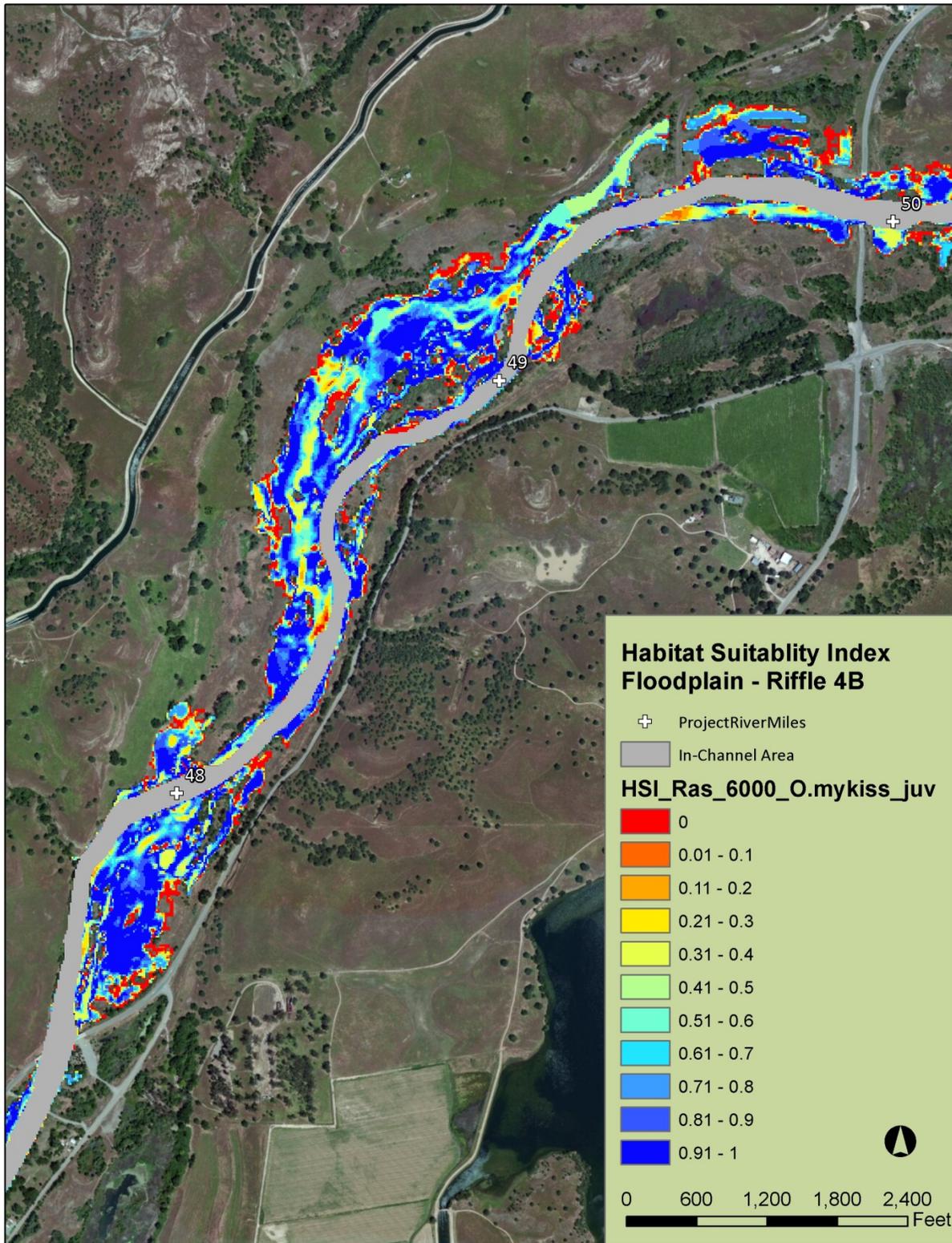
**Figure 30. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



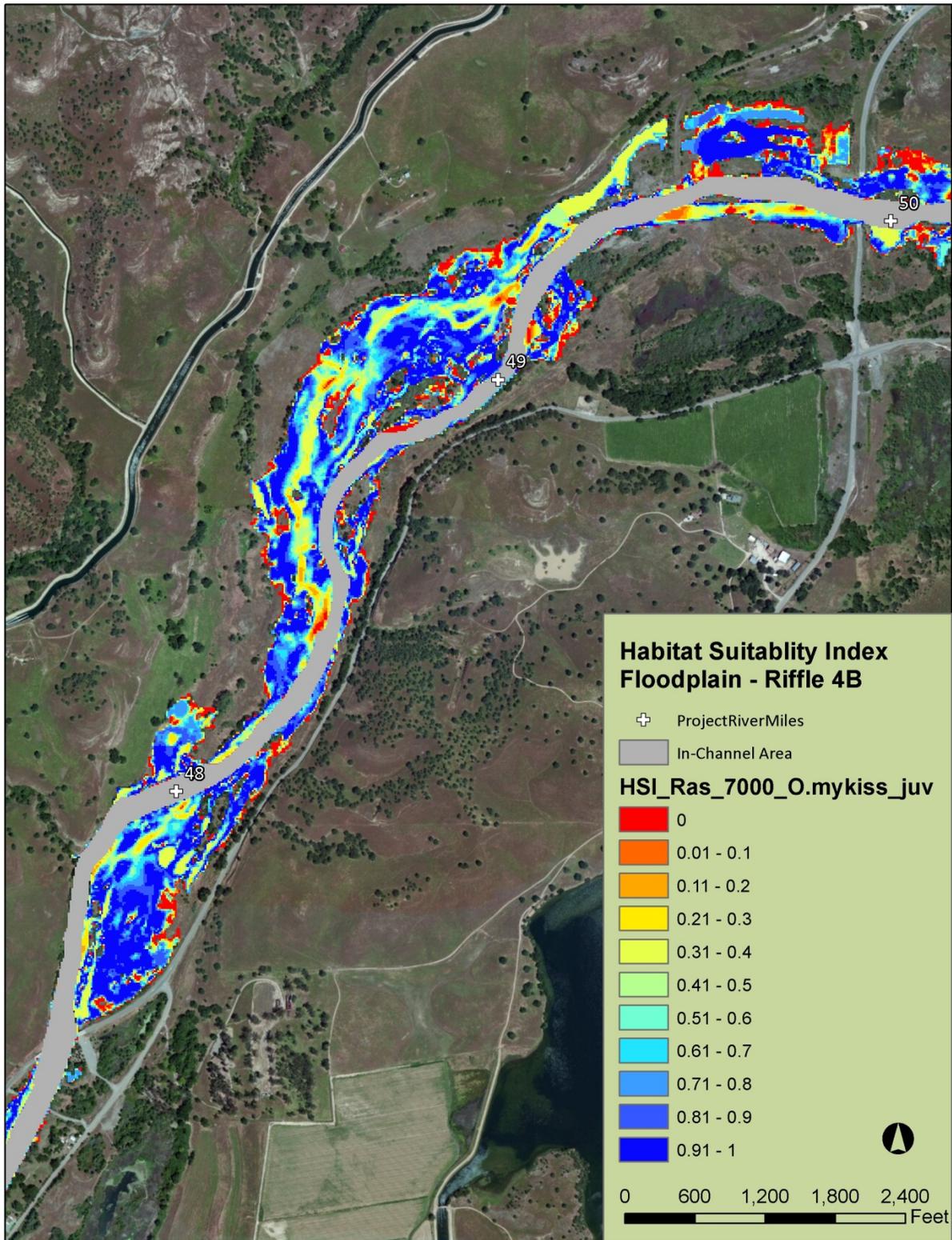
**Figure 31. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



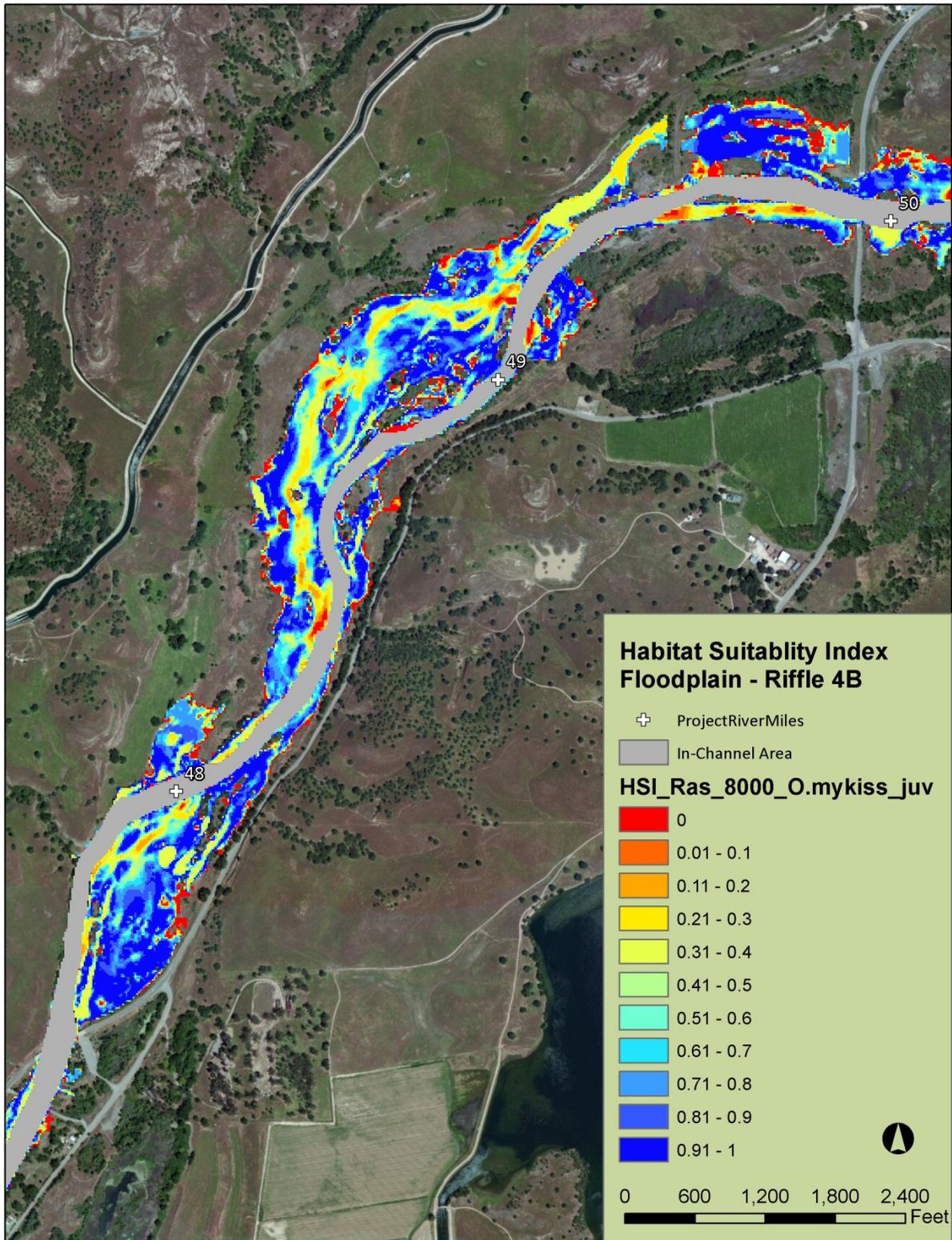
**Figure 32. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



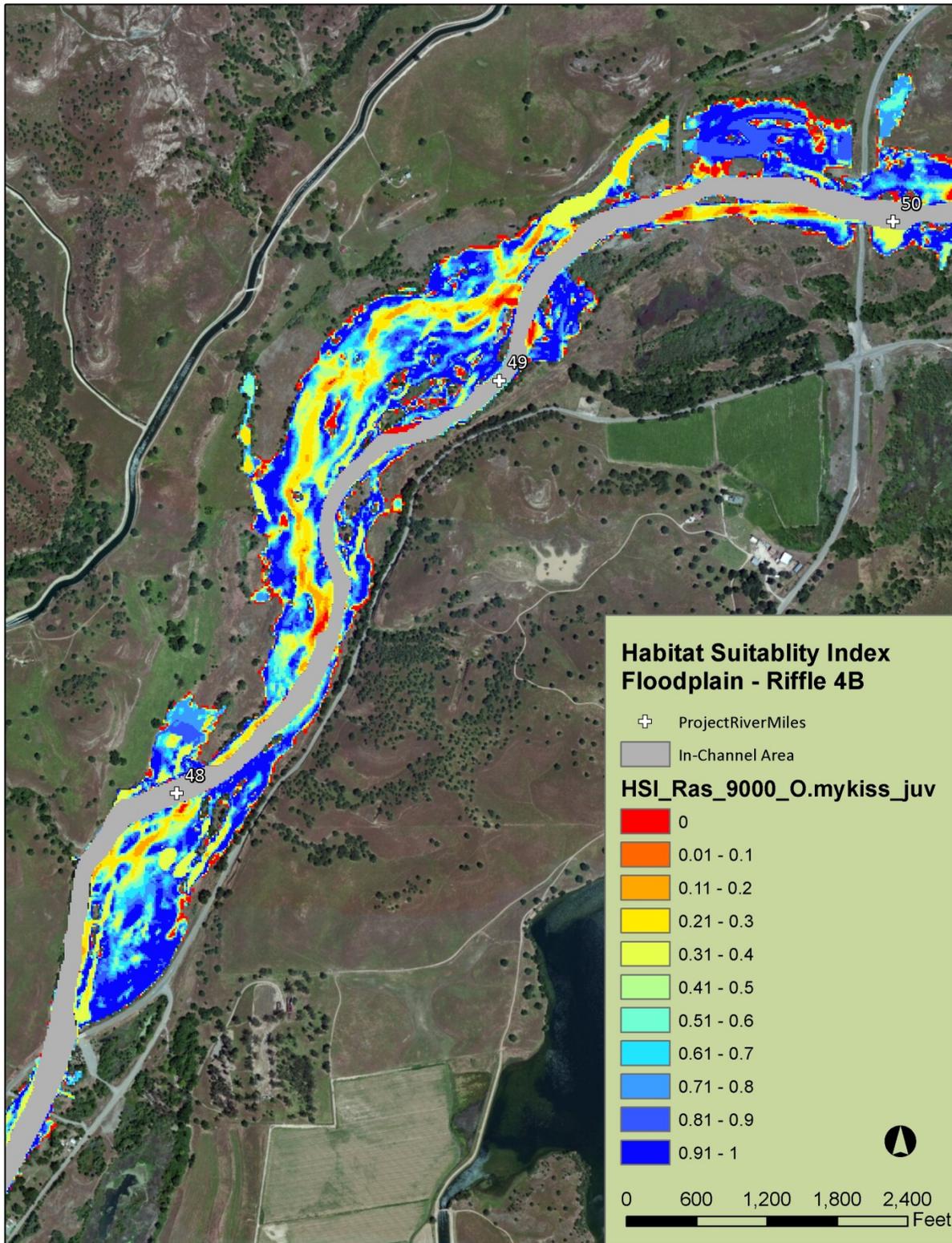
**Figure 33. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



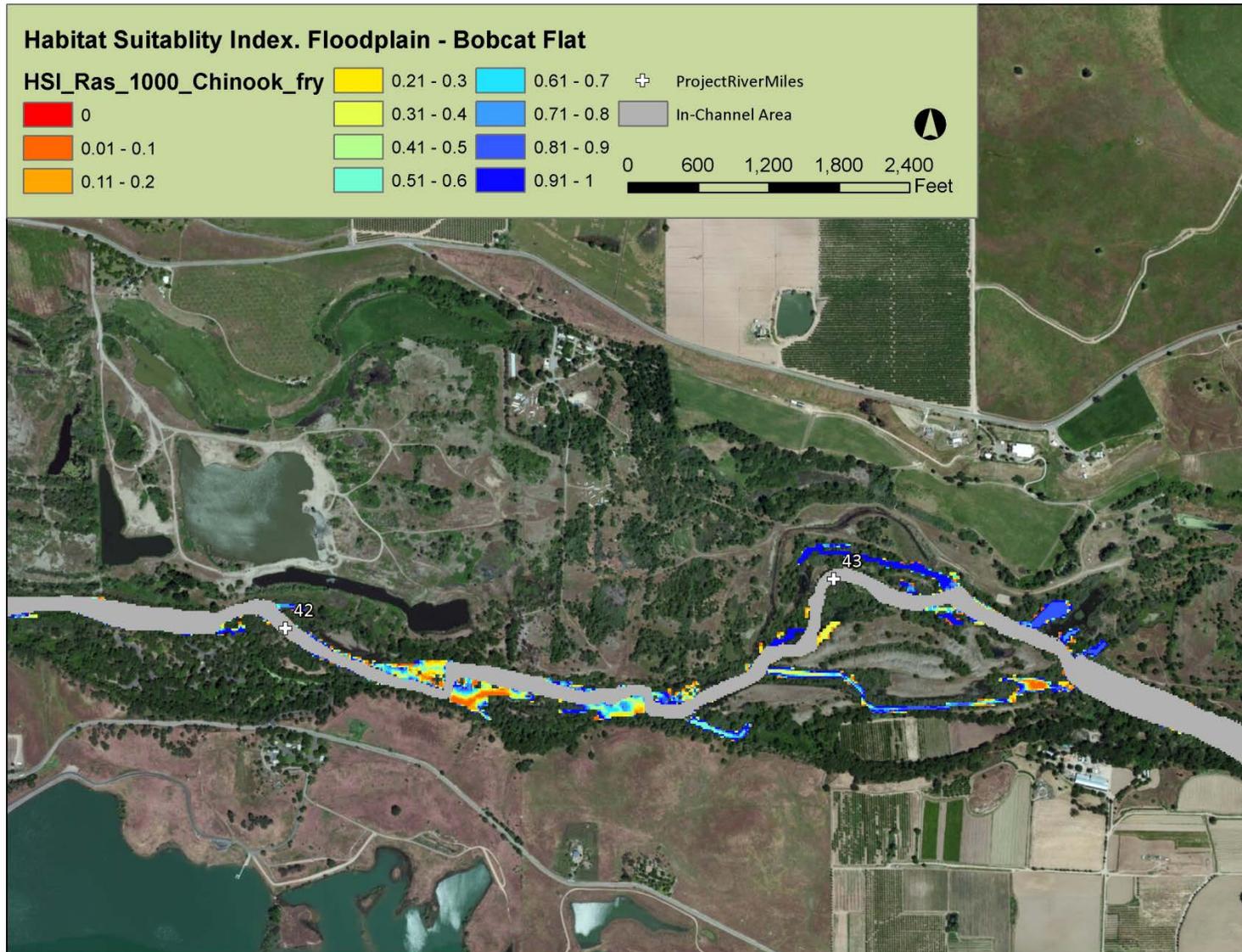
**Figure 34. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



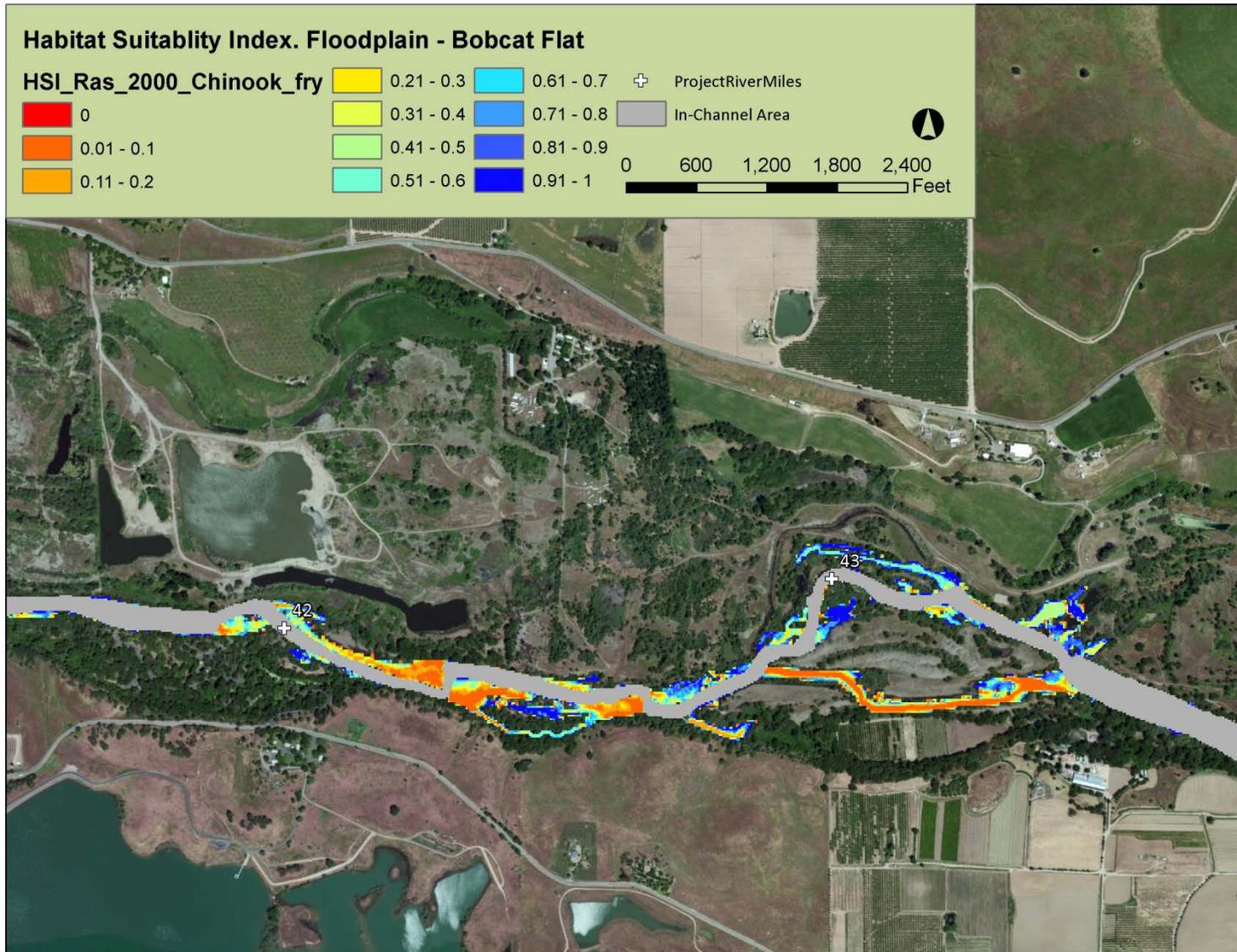
**Figure 35. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



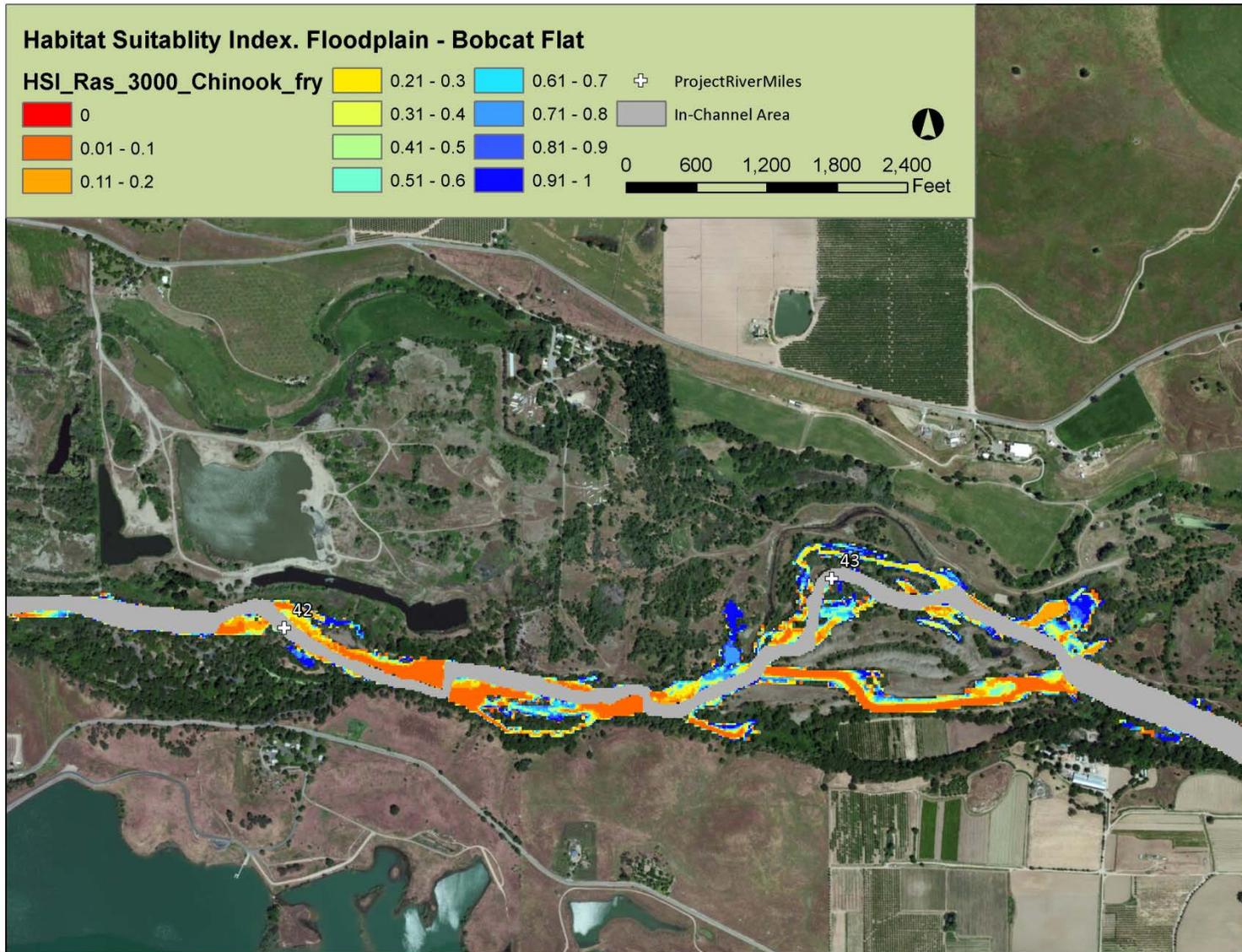
**Figure 36. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Riffle 4B (RM 48.5) along the lower Tuolumne River.**



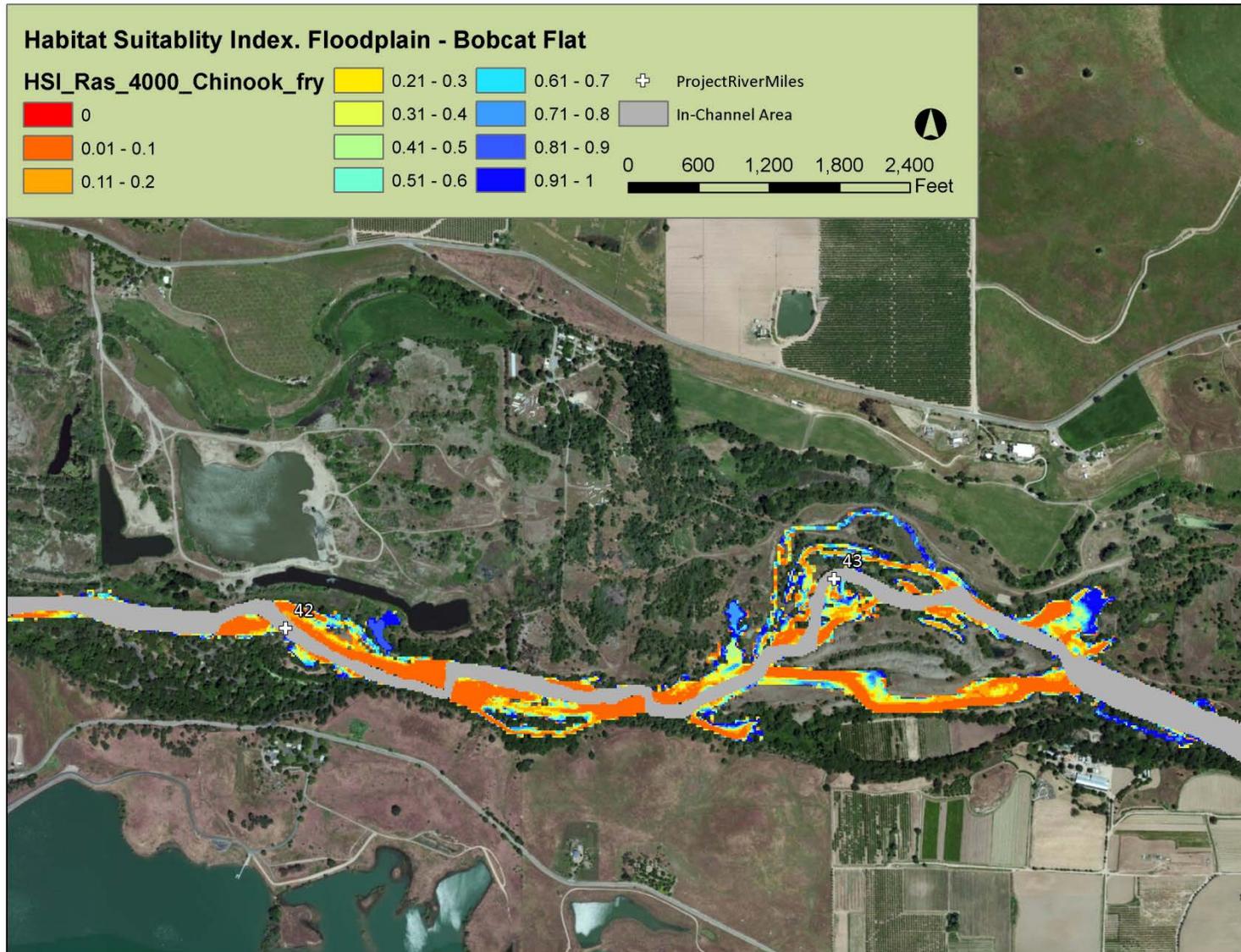
**Figure 37. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



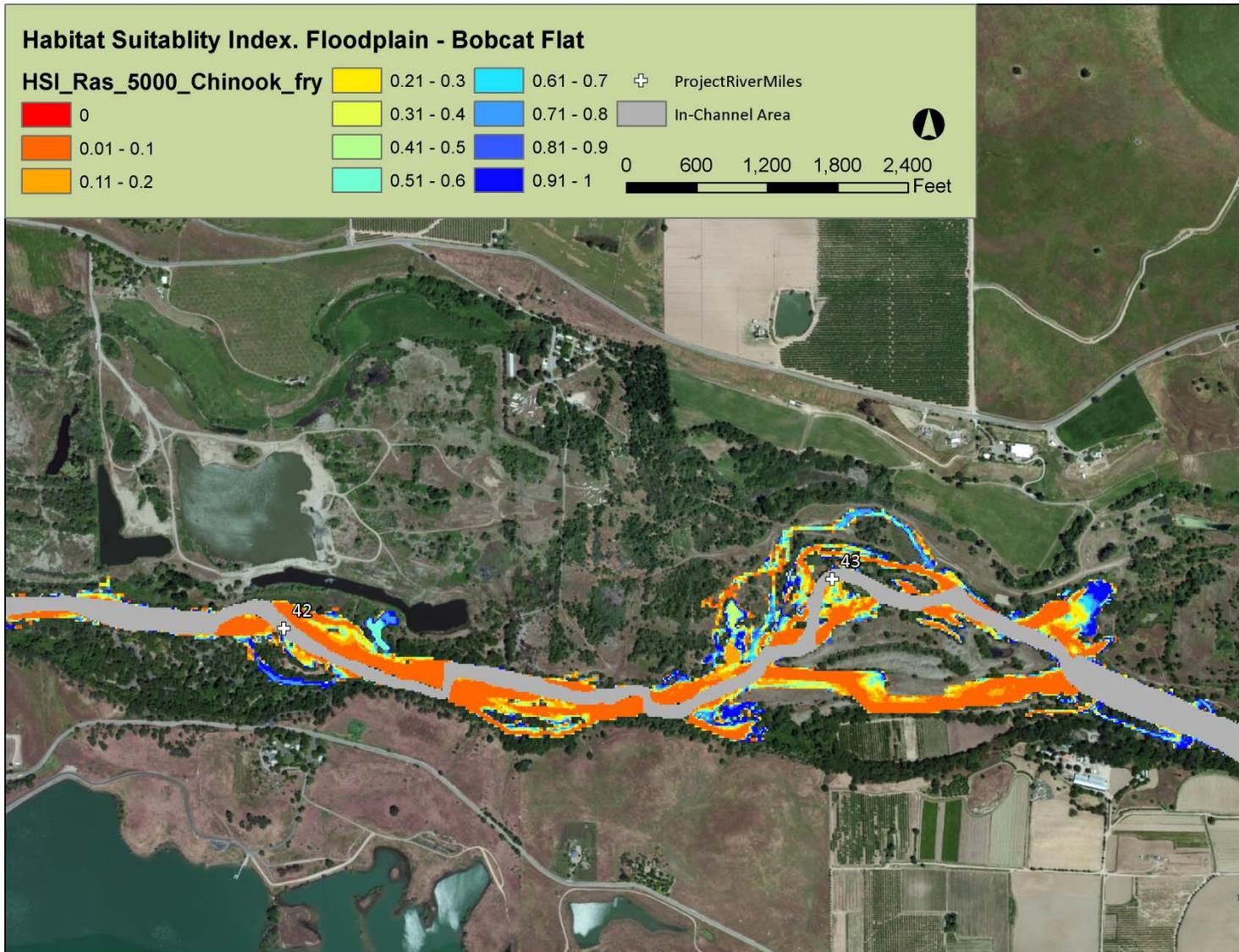
**Figure 38. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



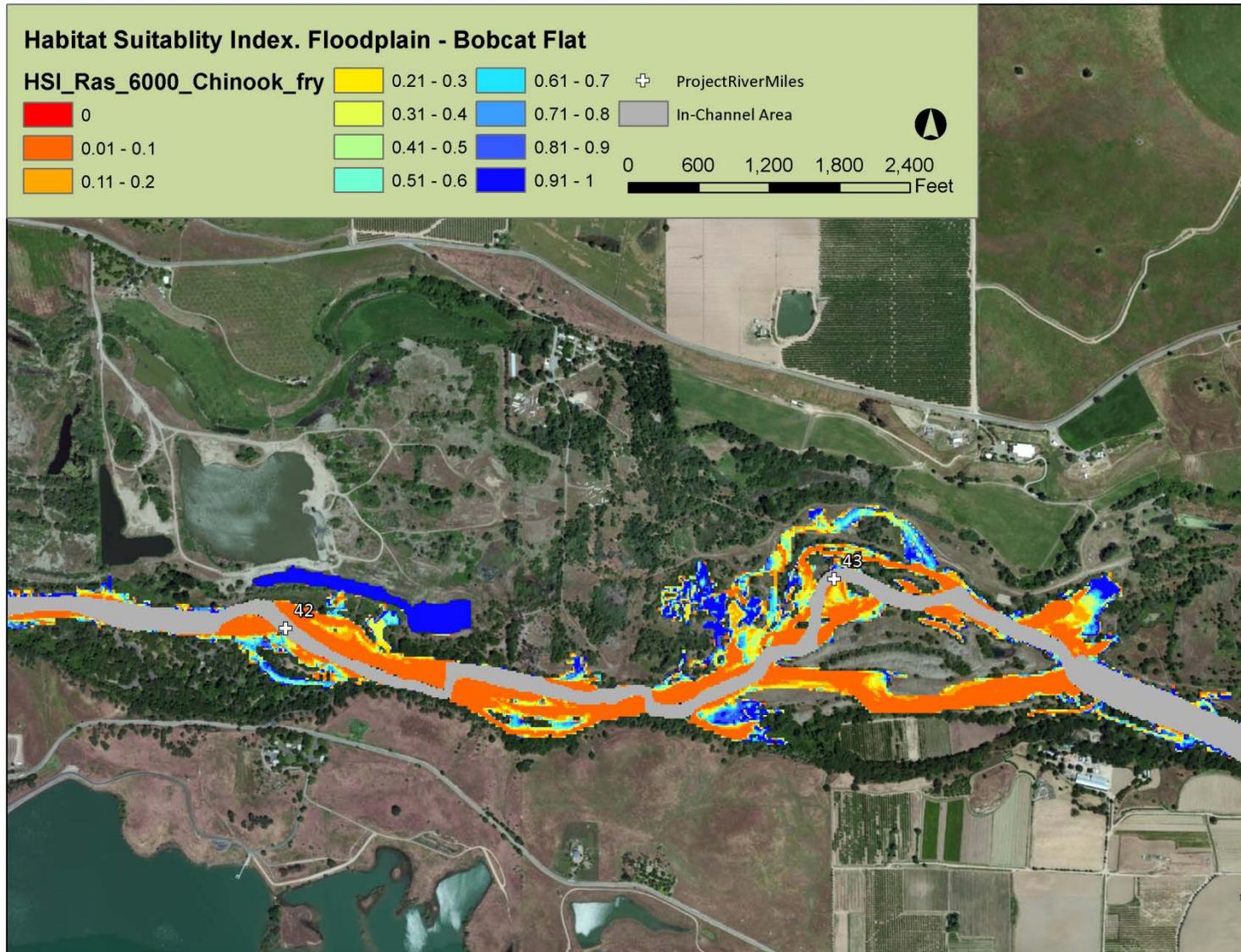
**Figure 39. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



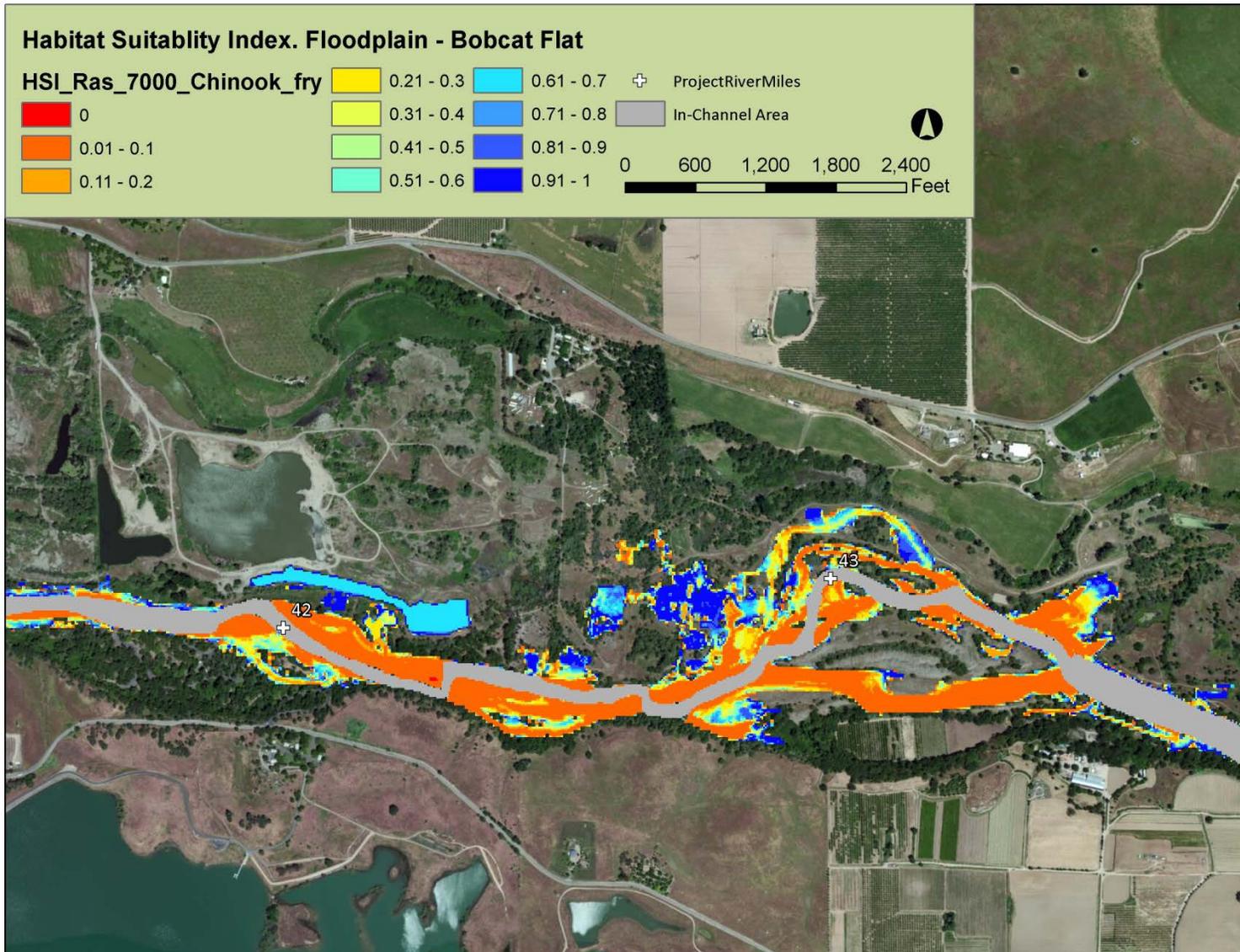
**Figure 40. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



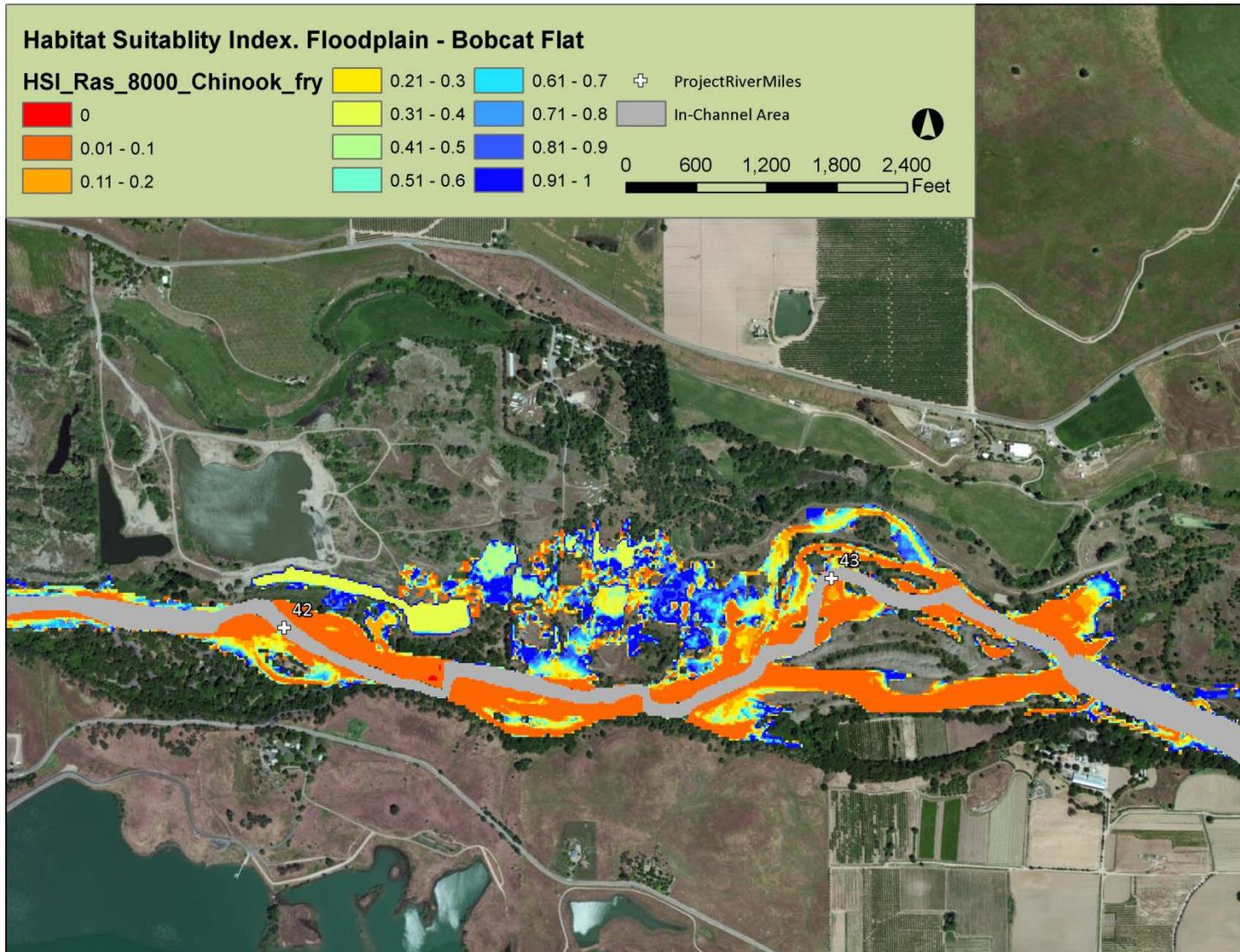
**Figure 41. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 42. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 43. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 44. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**

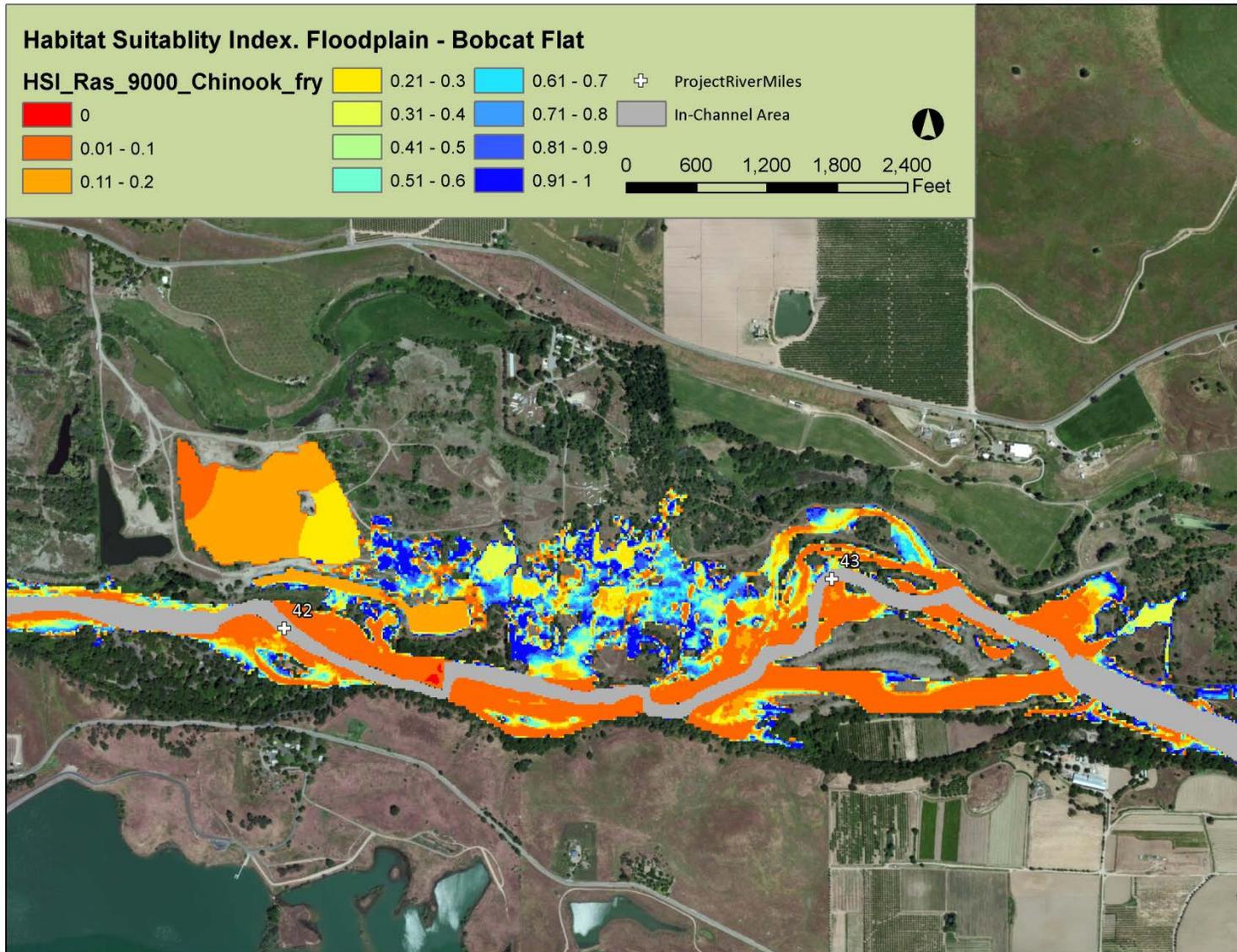
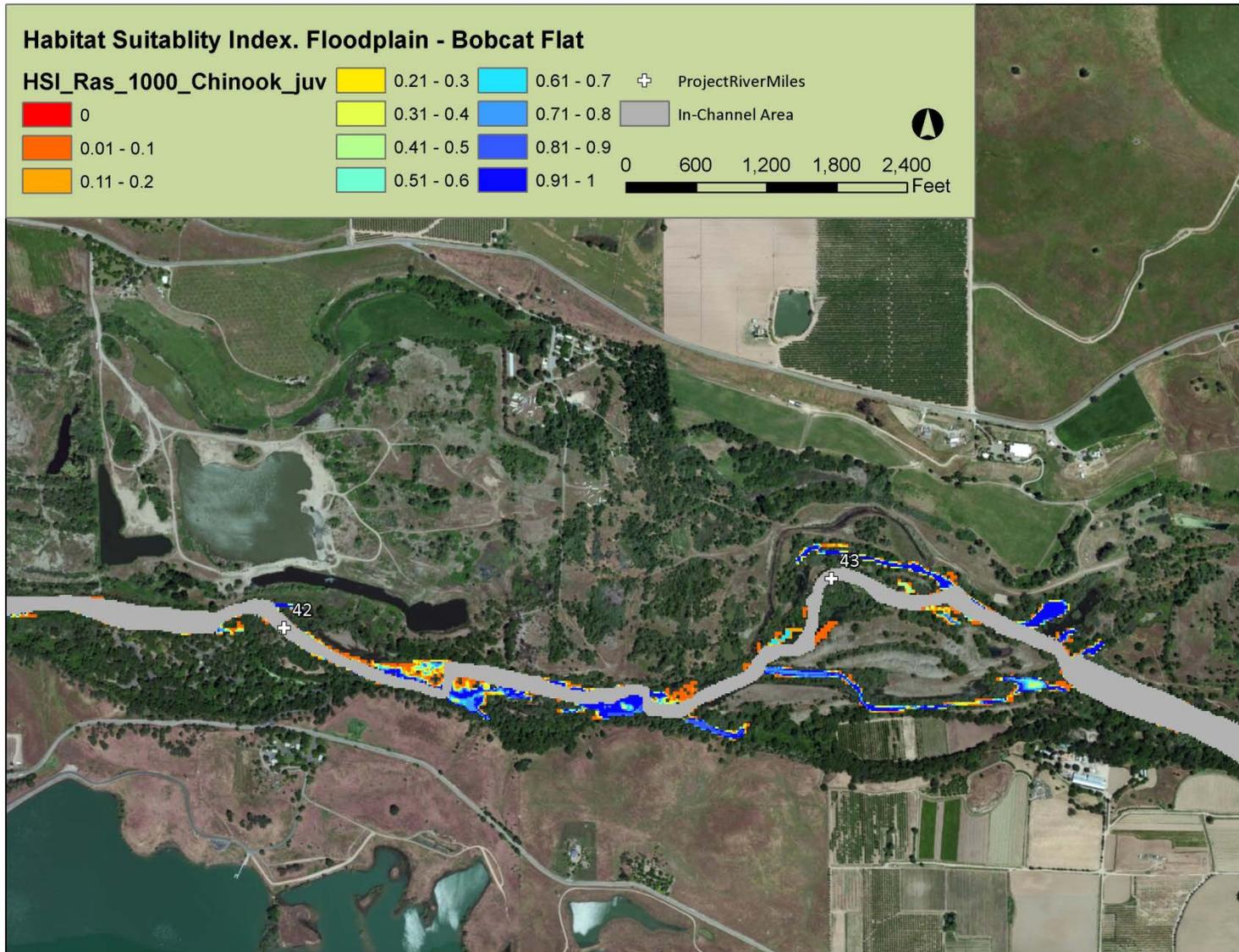
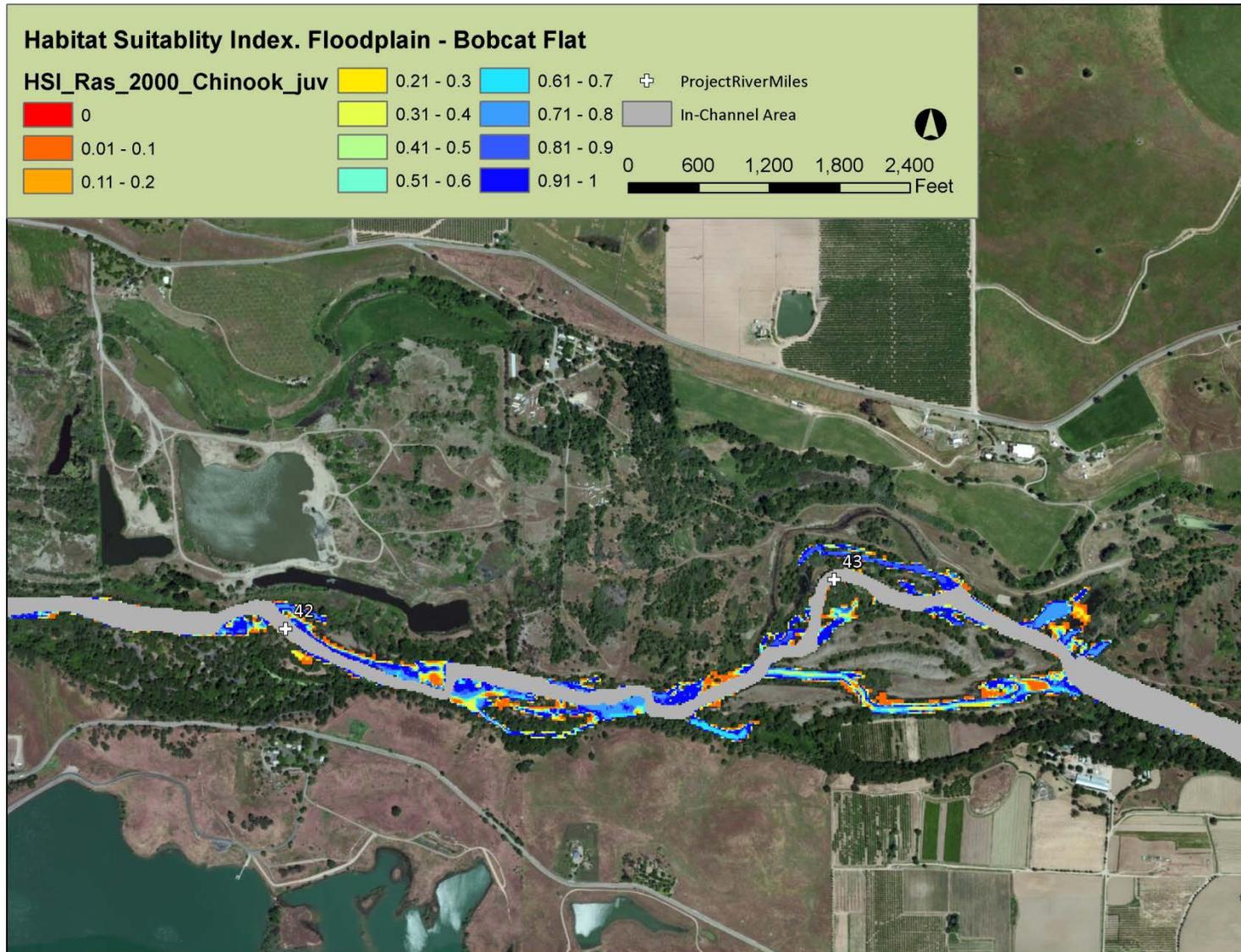


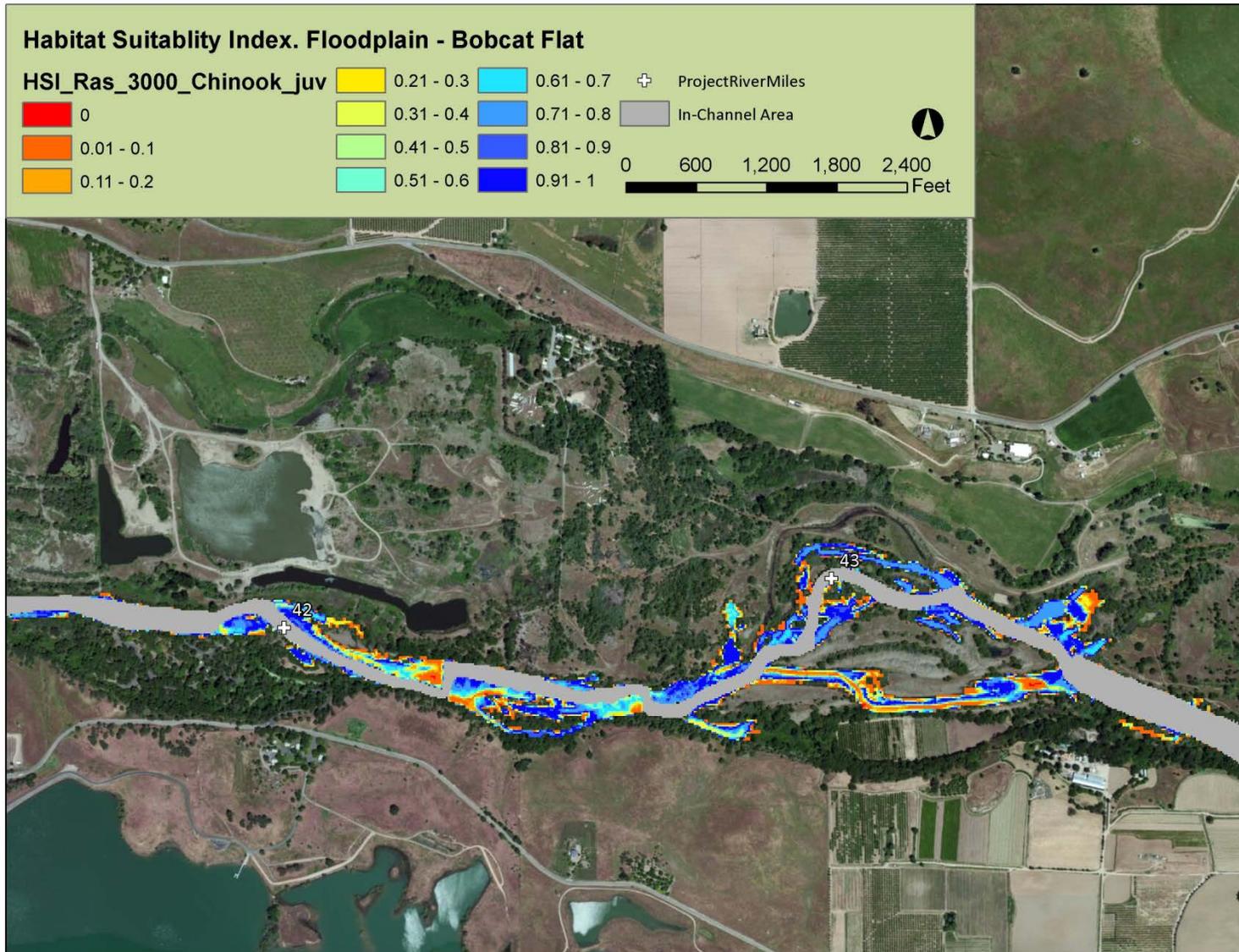
Figure 45. Example plot of joint Chinook salmon fry habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.



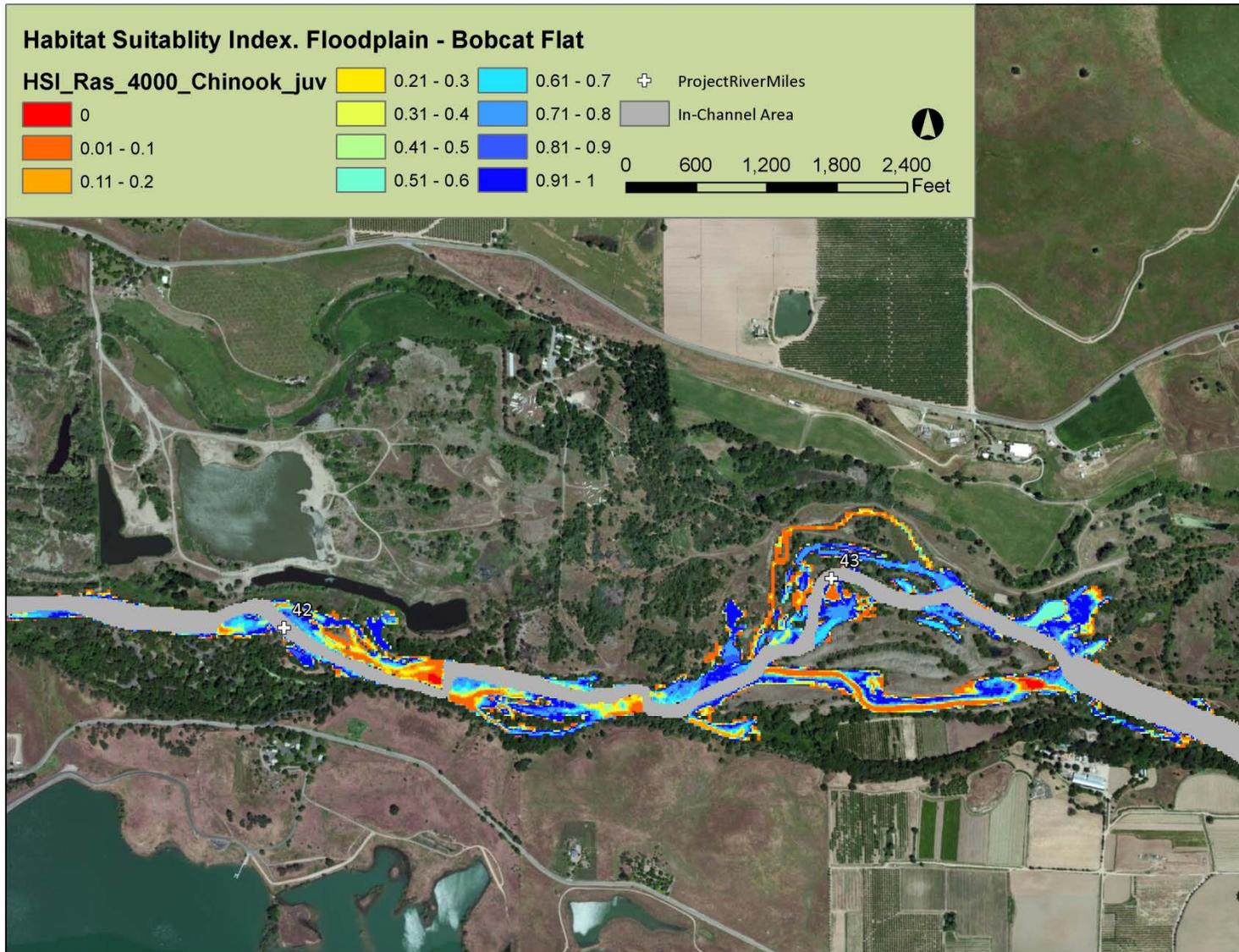
**Figure 46. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



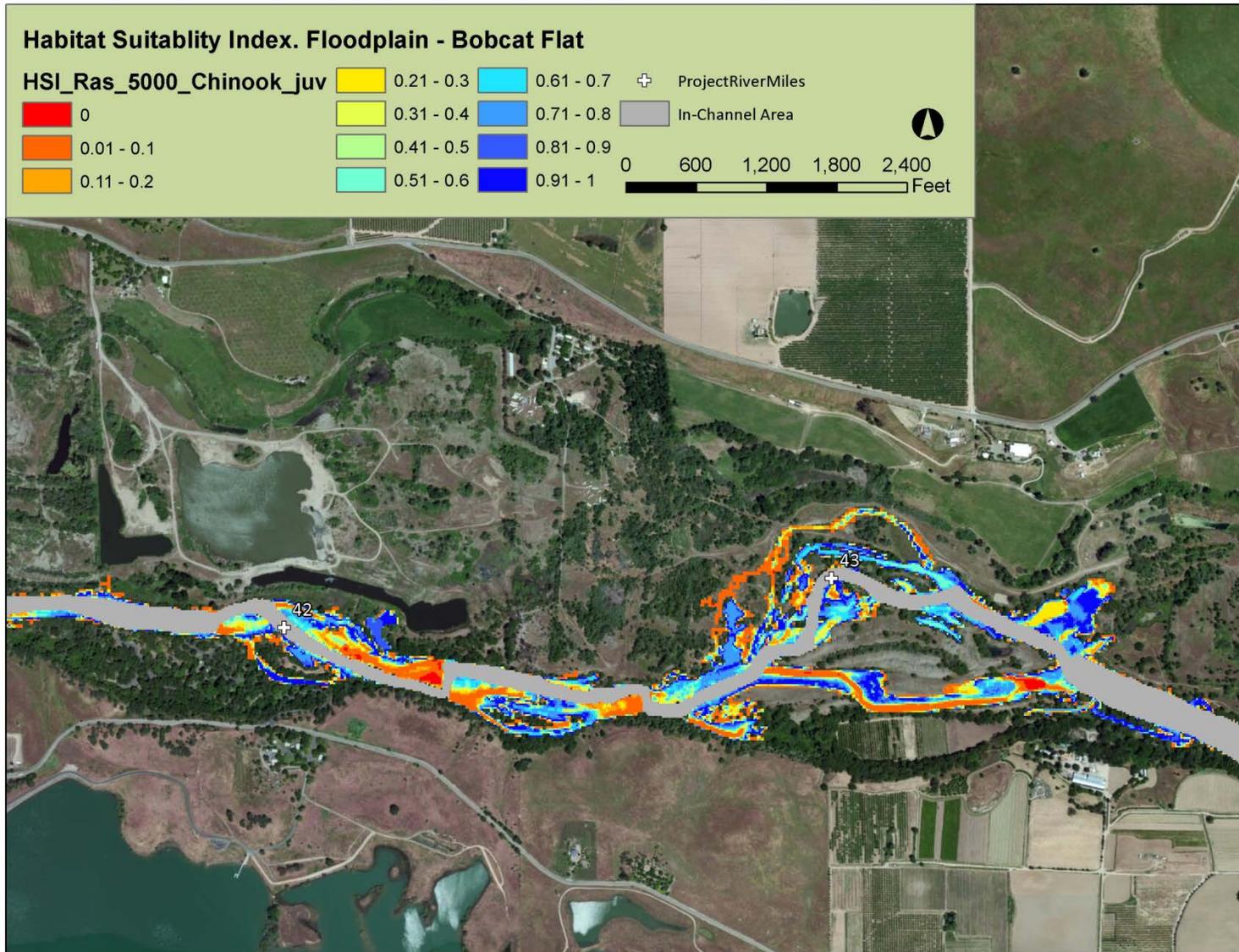
**Figure 47. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



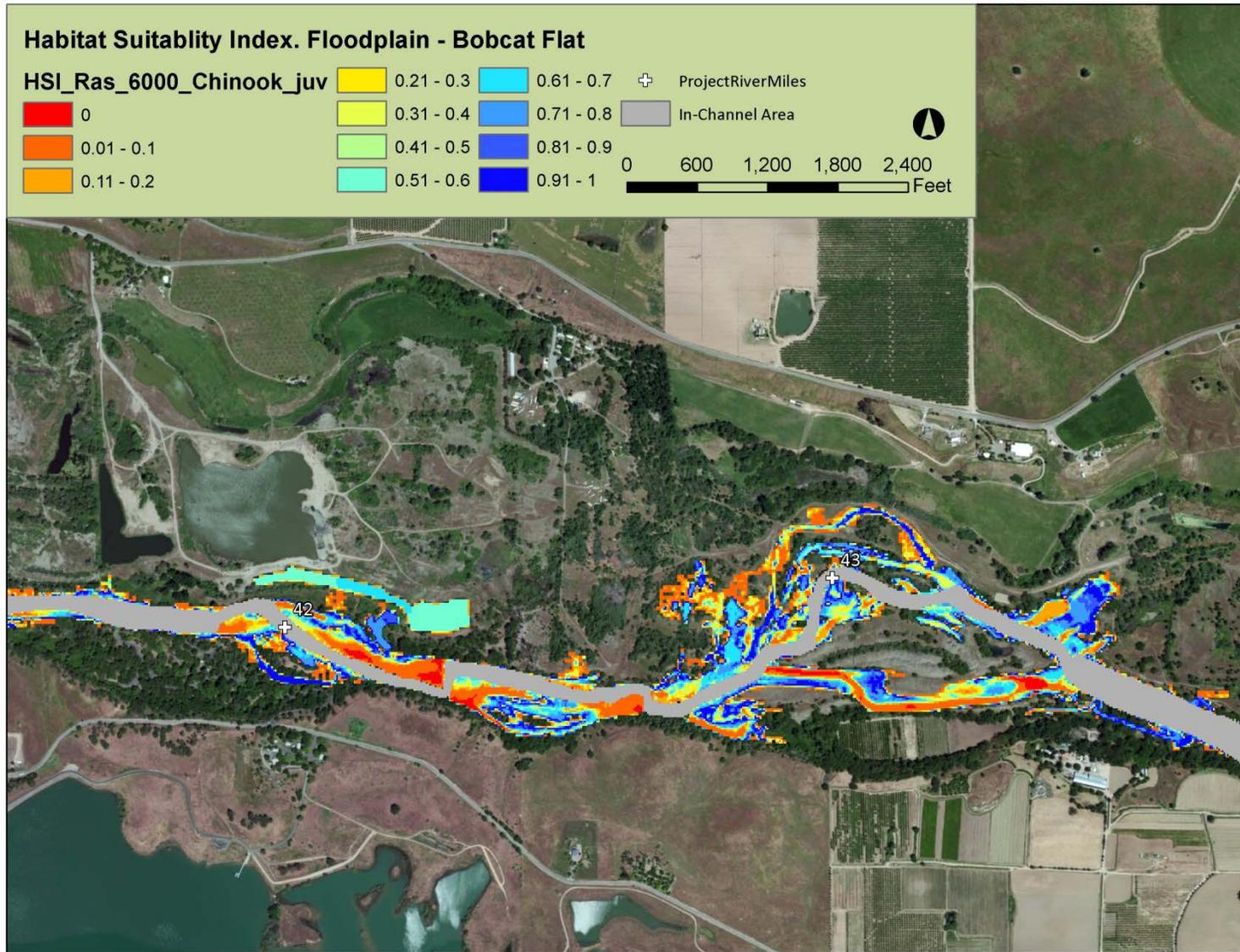
**Figure 48. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



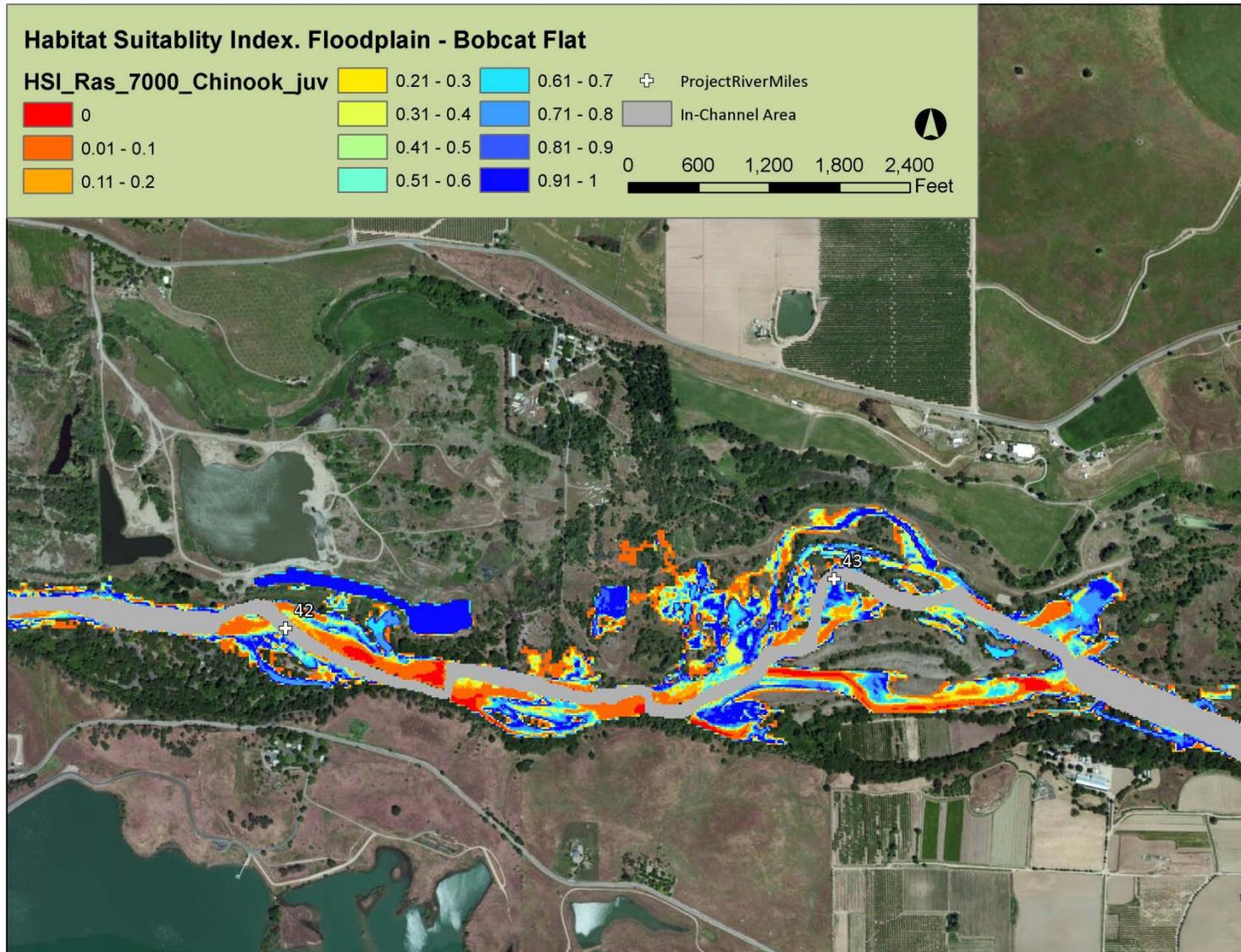
**Figure 49. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



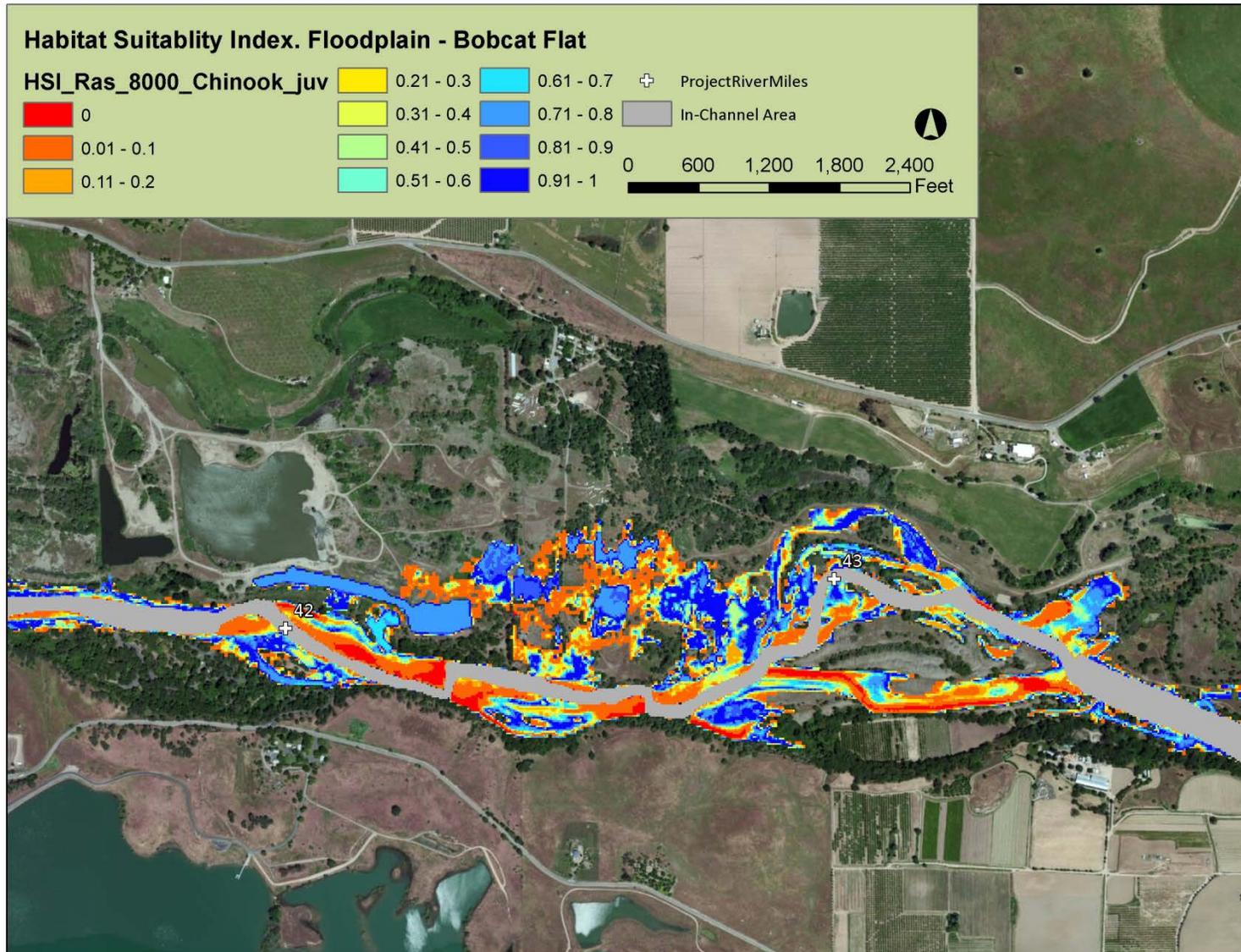
**Figure 50. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



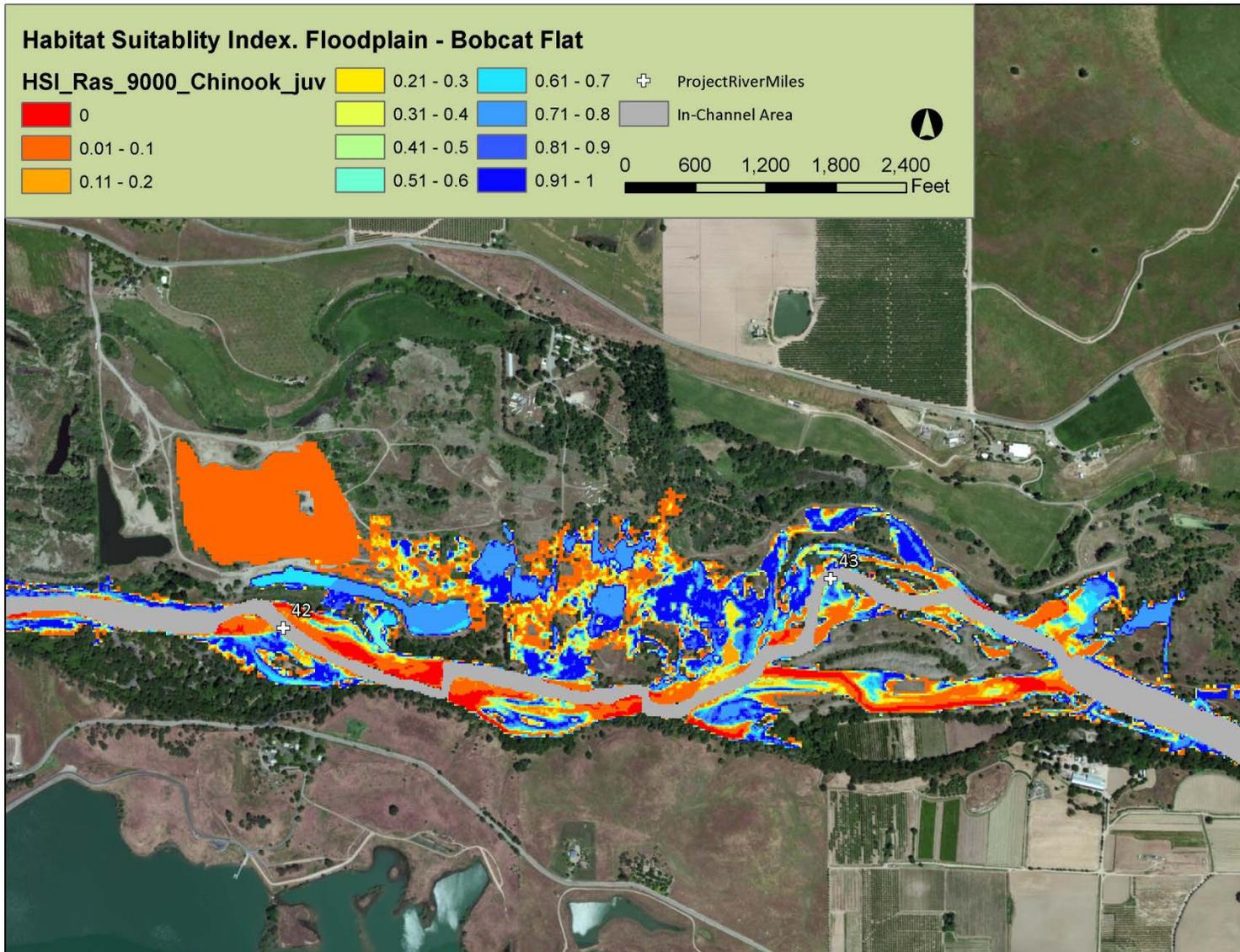
**Figure 51. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



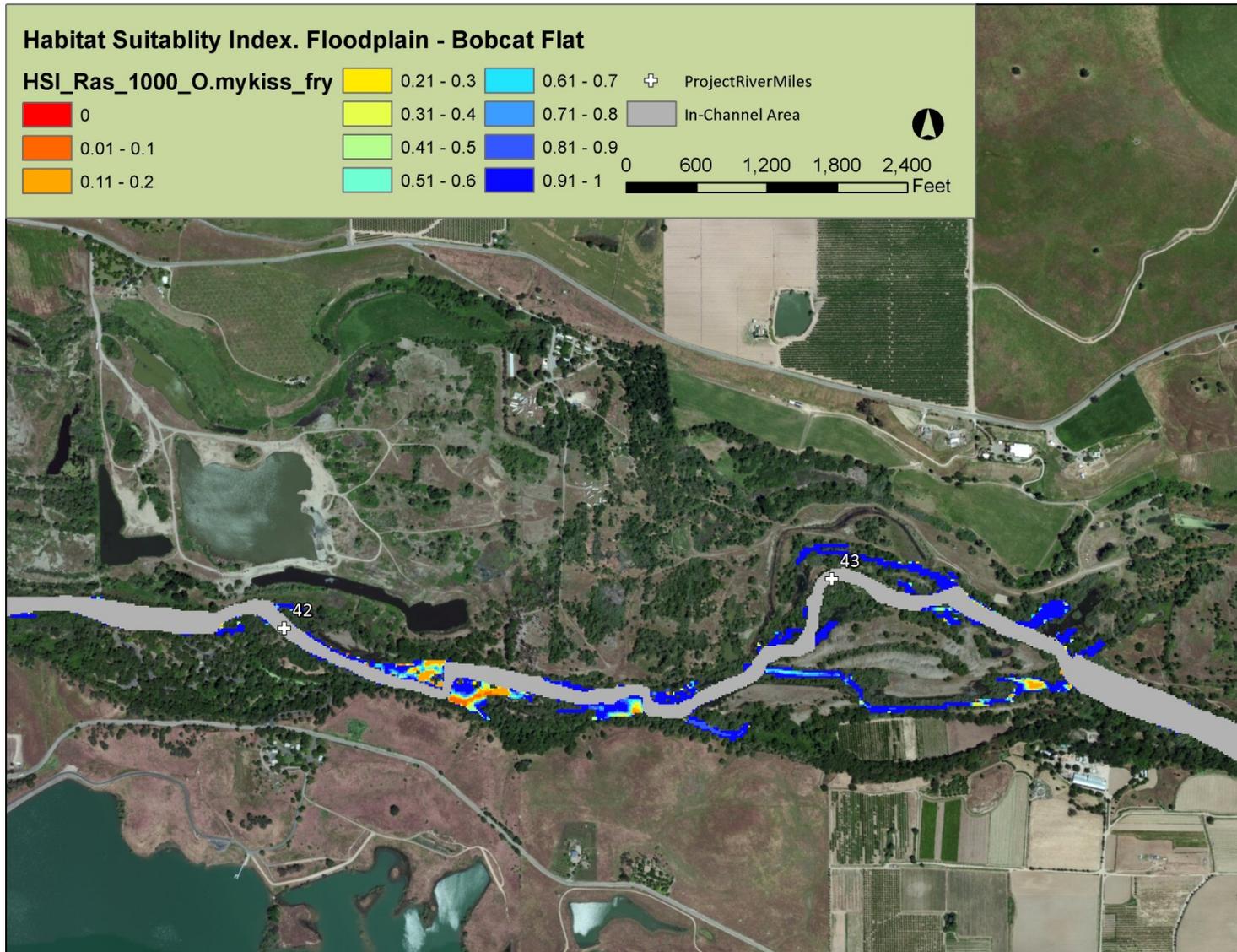
**Figure 52. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



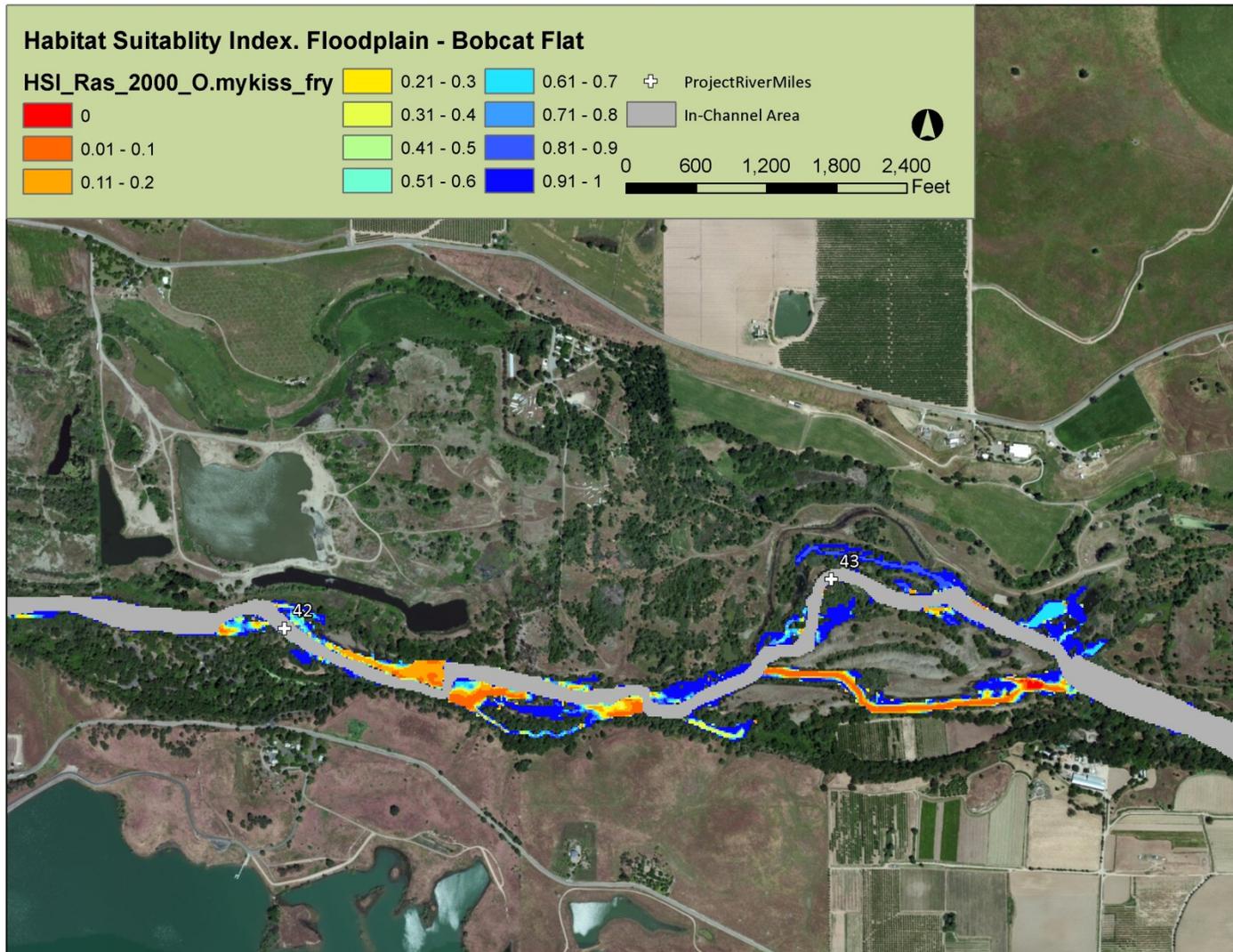
**Figure 53. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



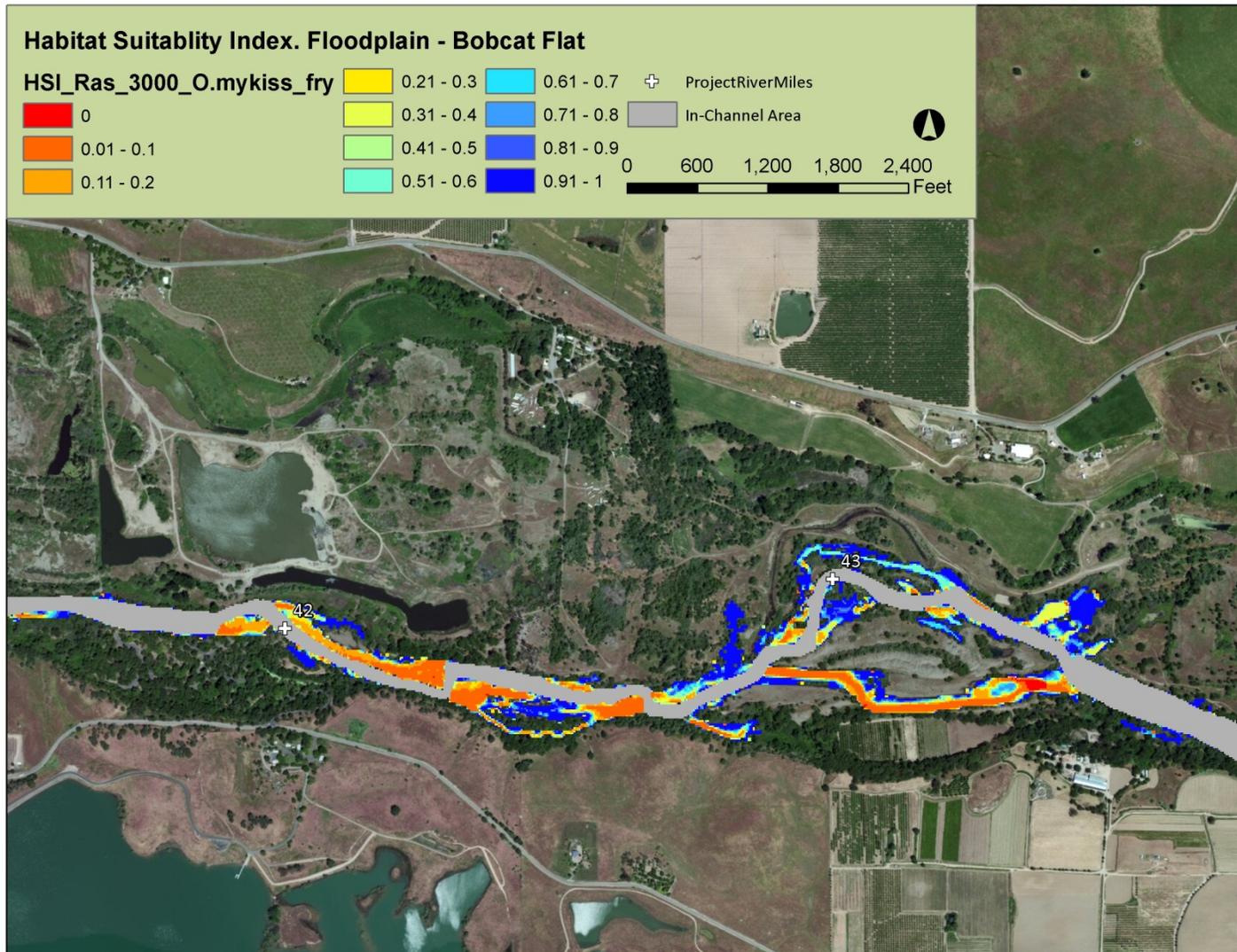
**Figure 54. Example plot of joint Chinook salmon juvenile habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 55. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 56. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 57. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**

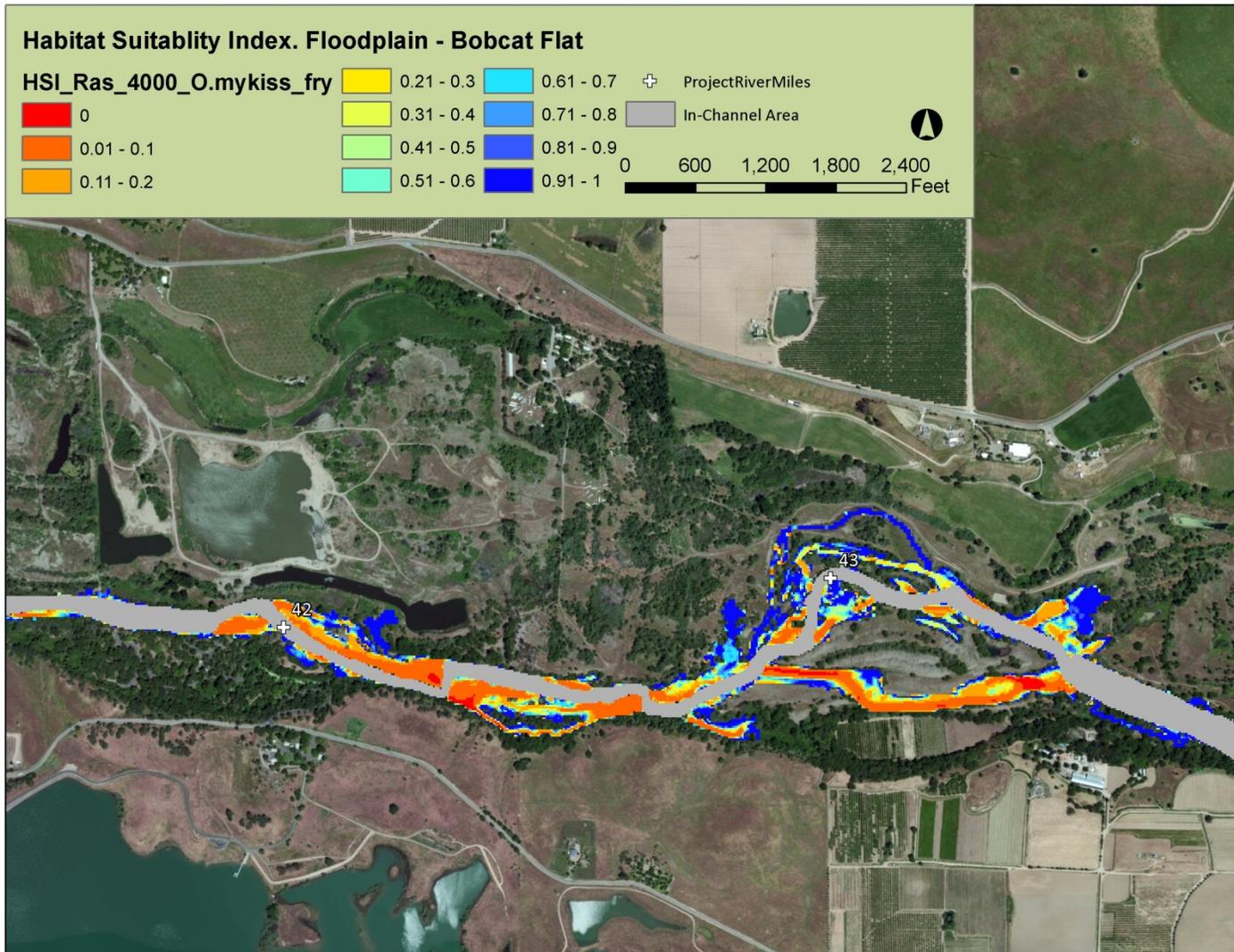


Figure 58. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.

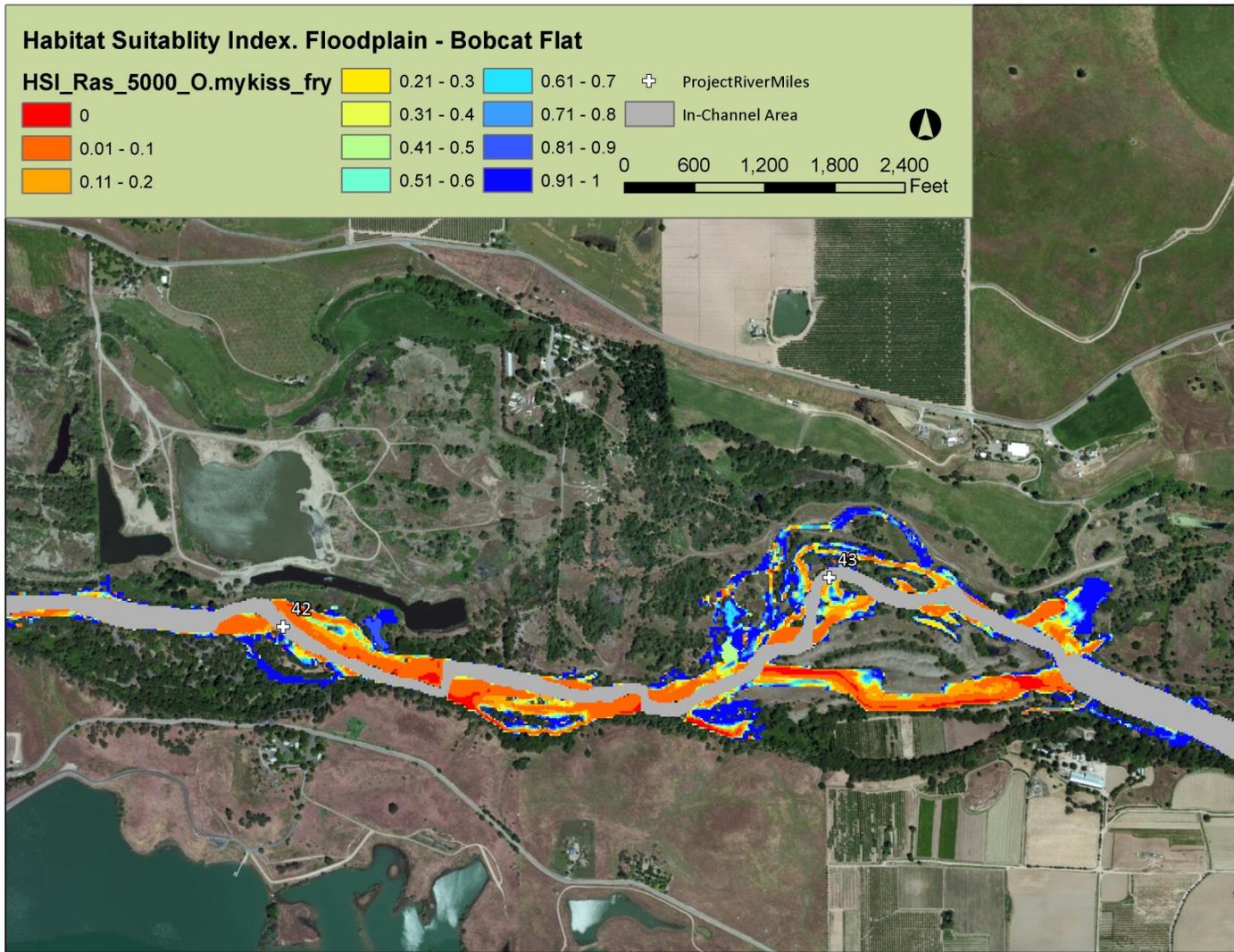
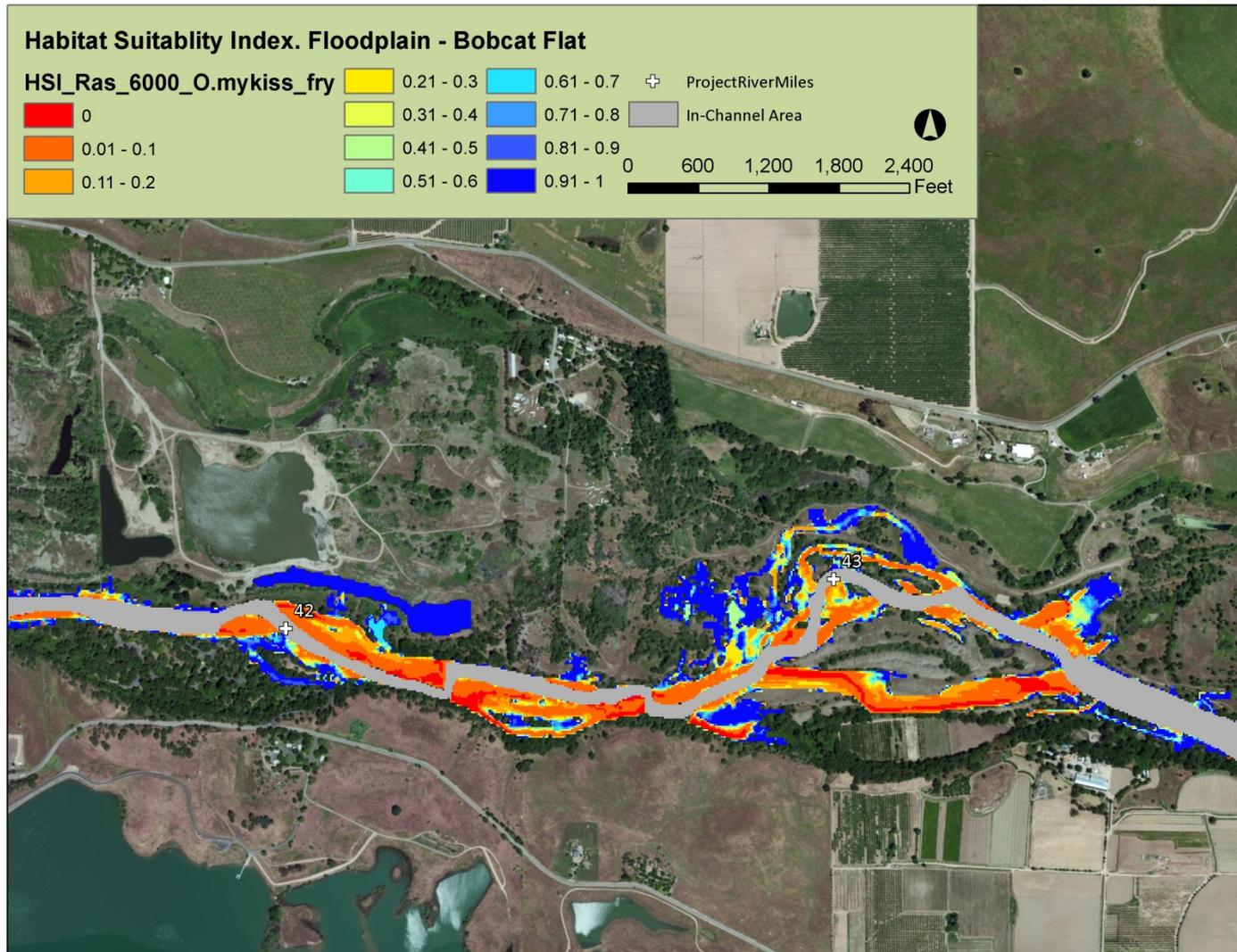
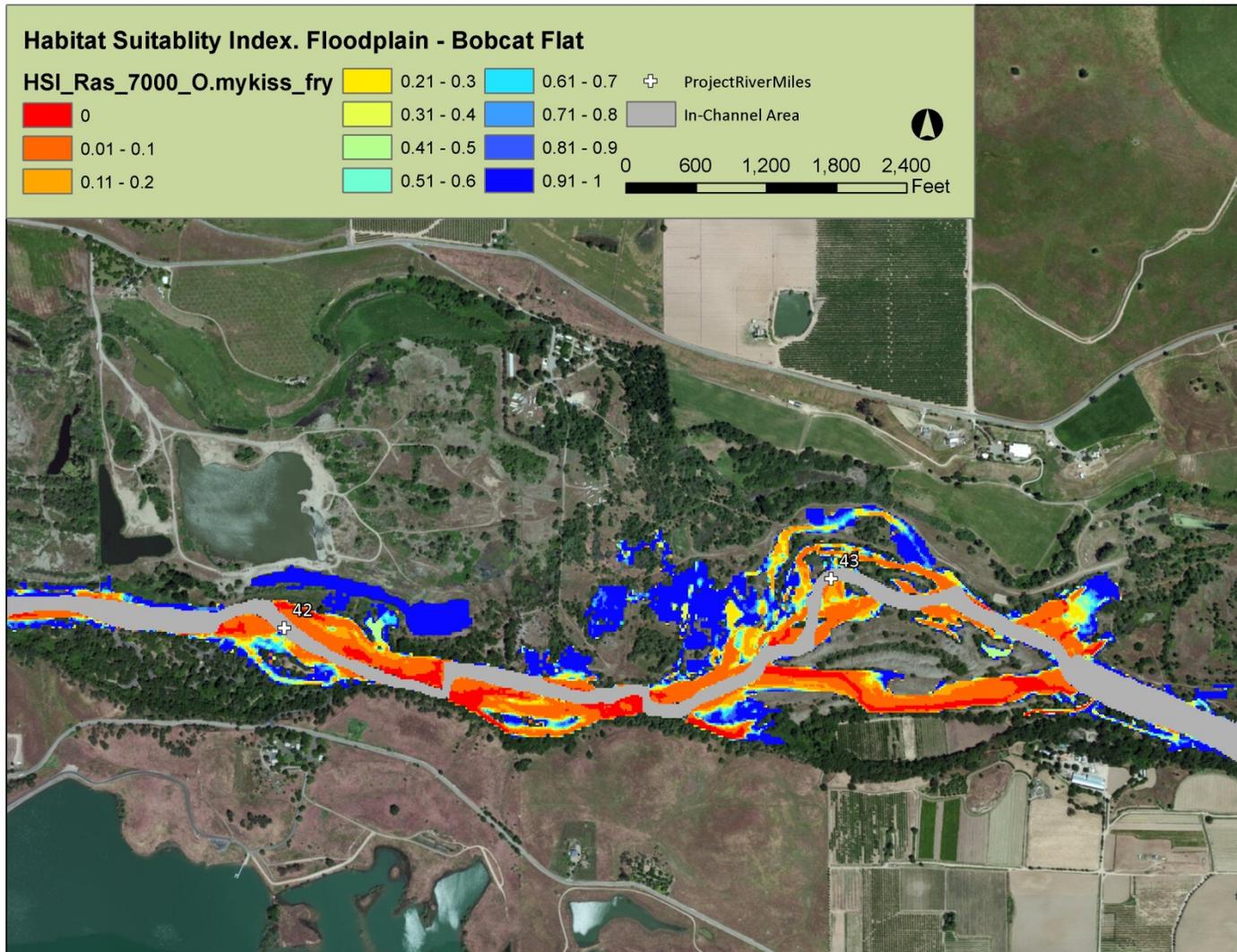


Figure 59. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.



**Figure 60. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 61. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**

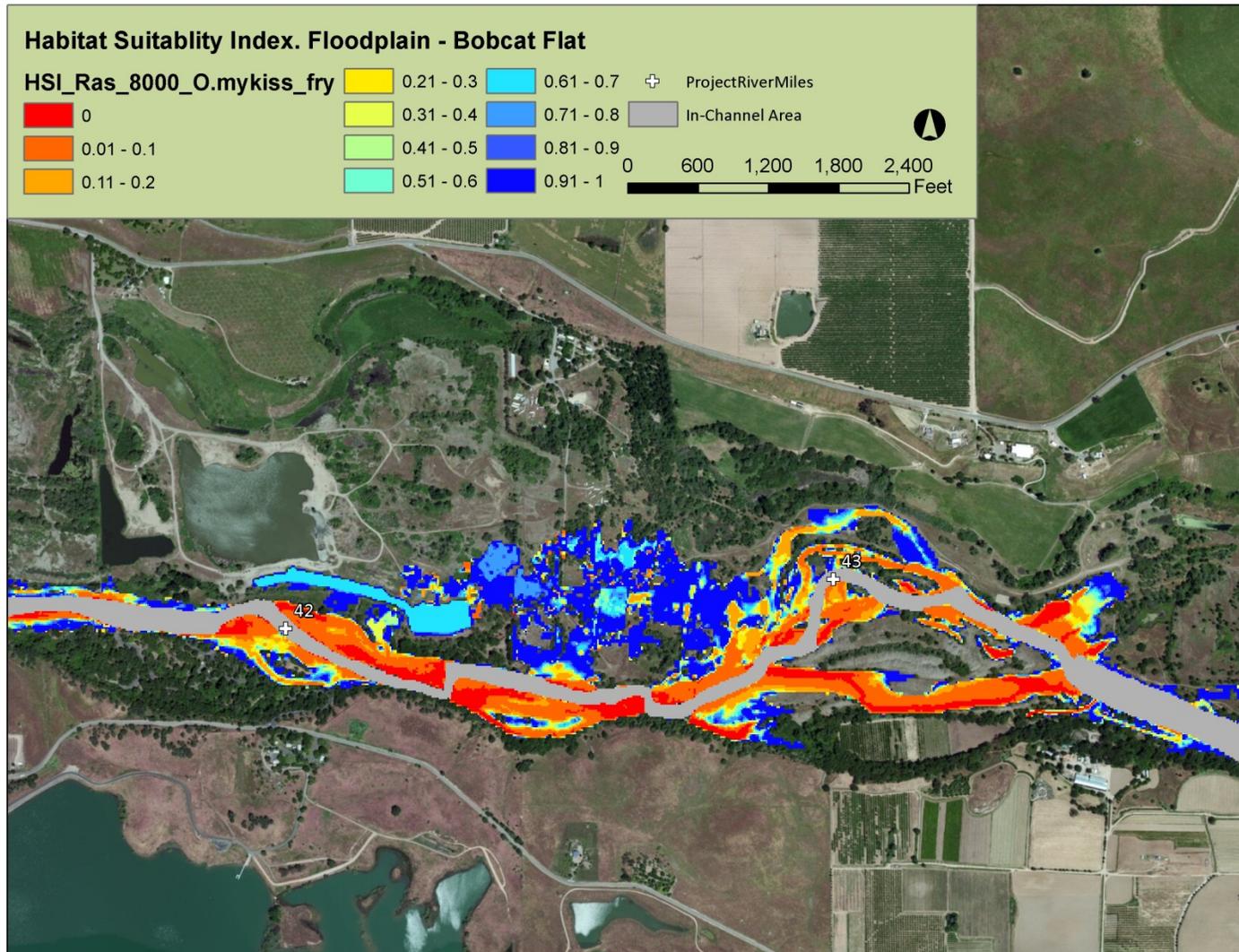


Figure 62. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.

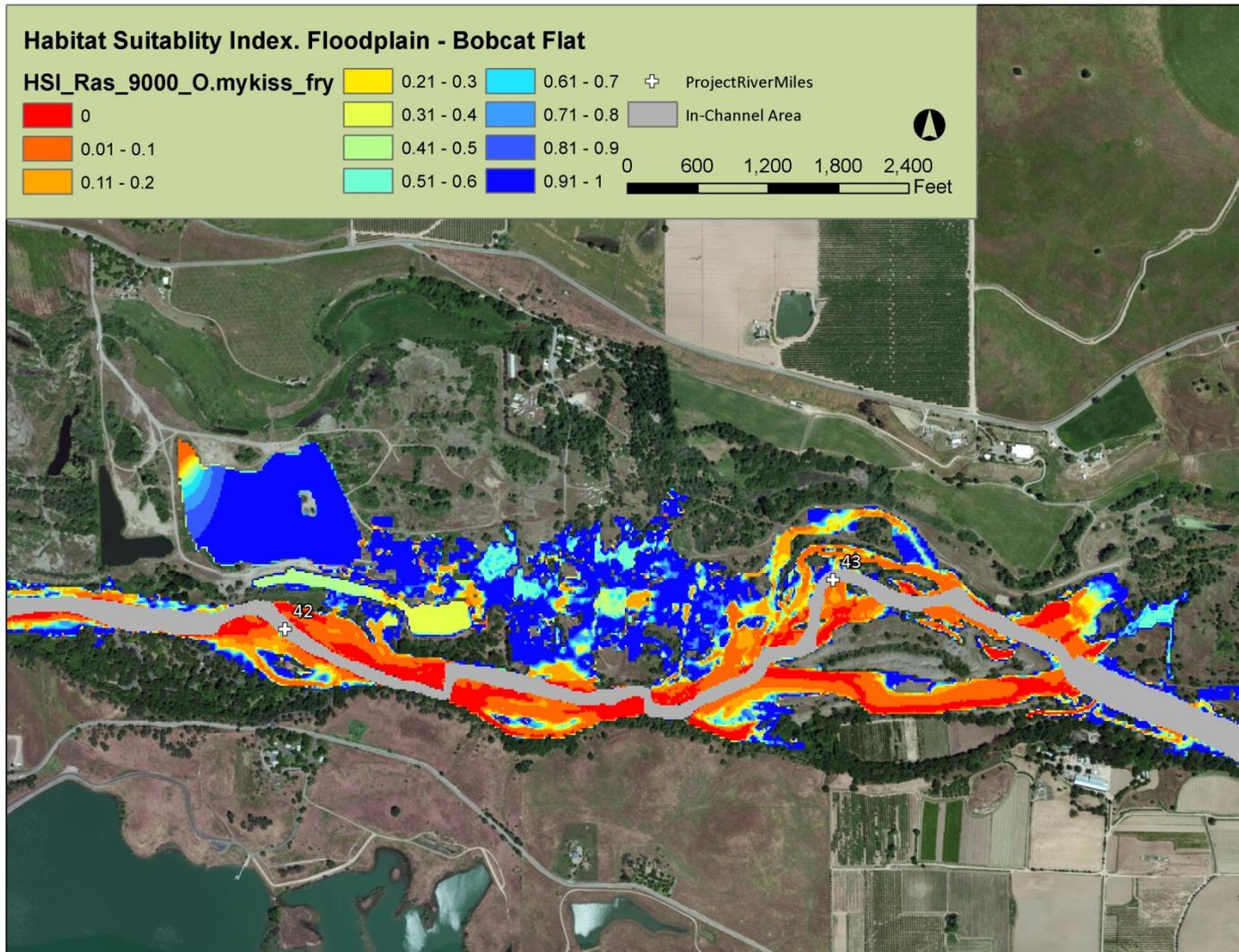
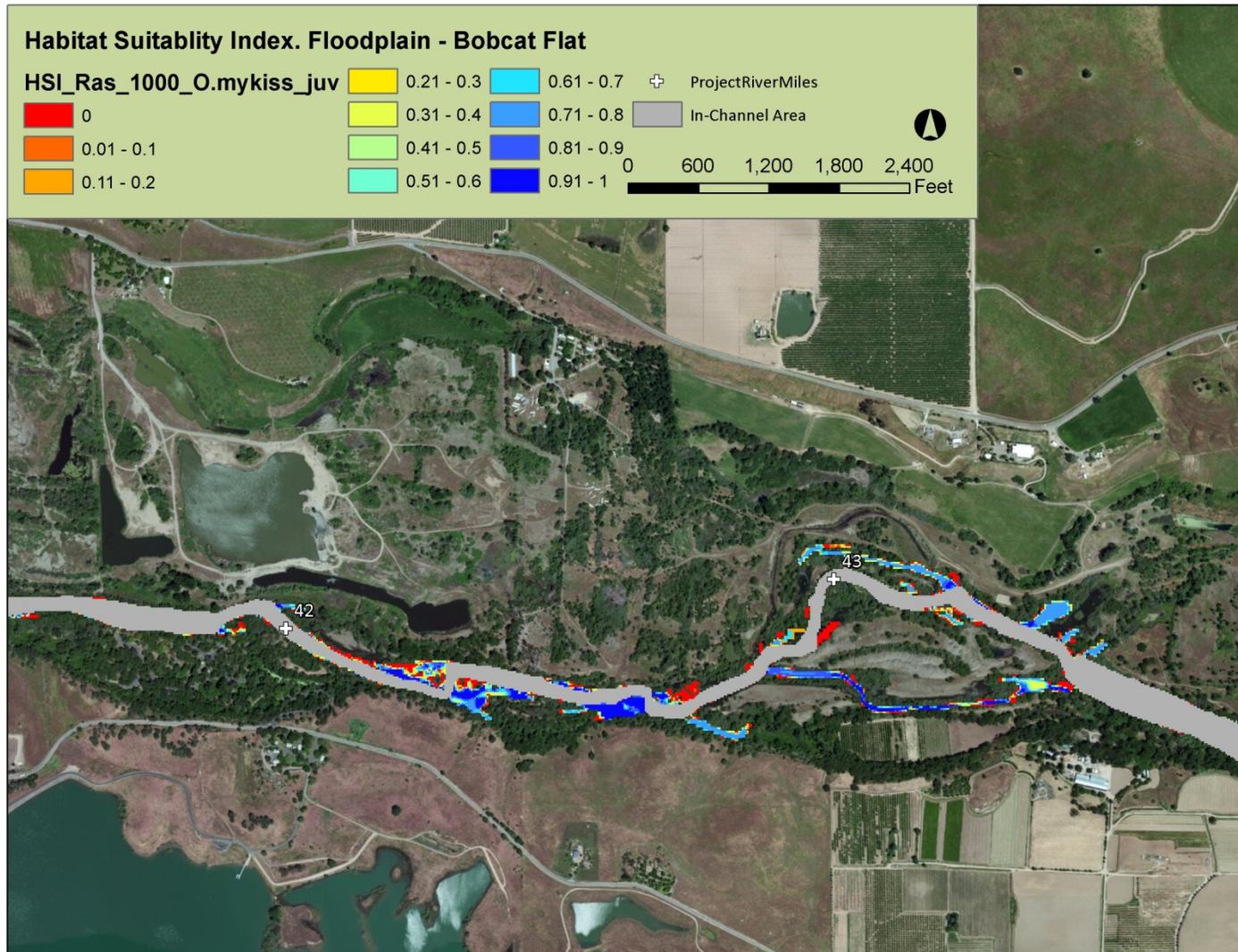
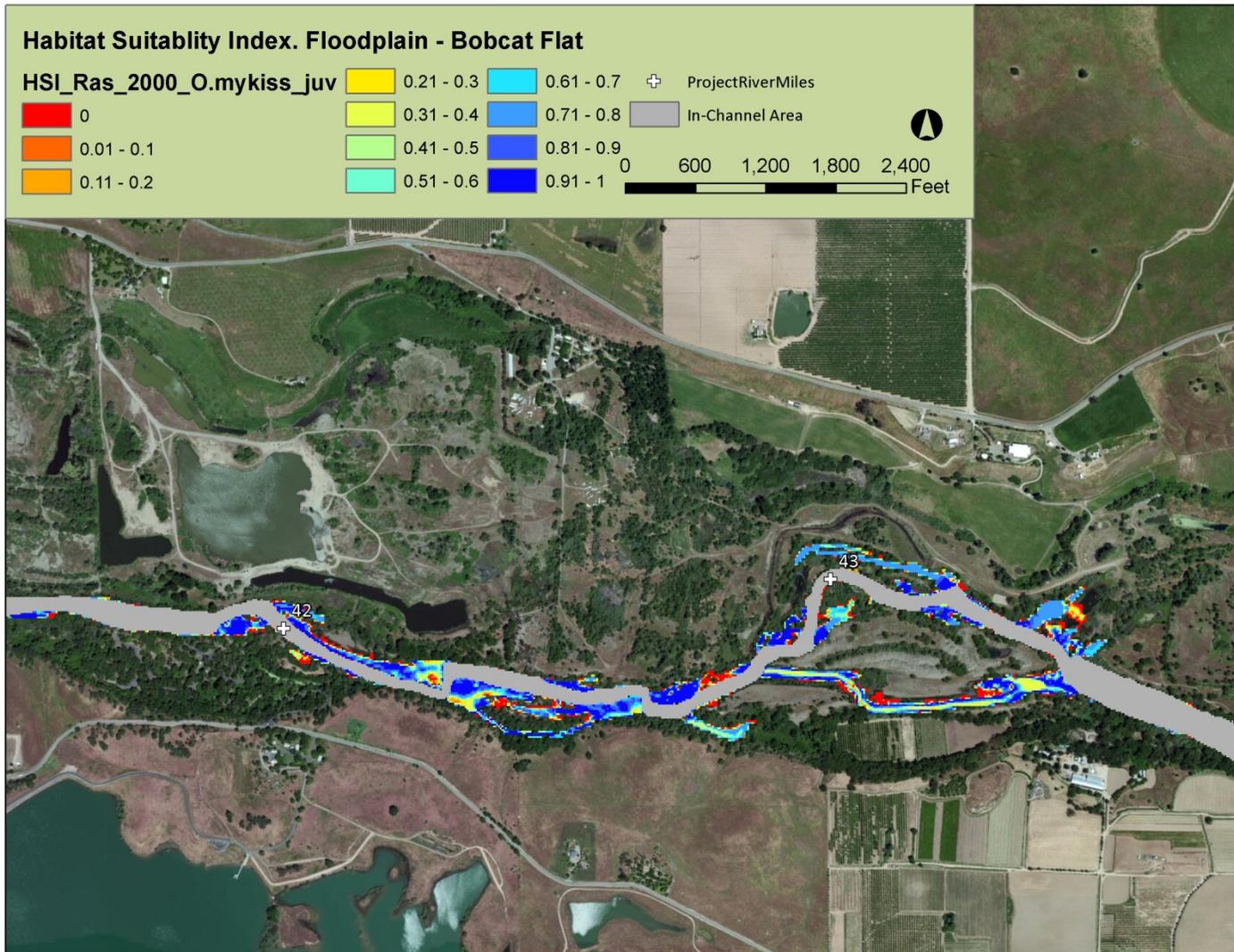


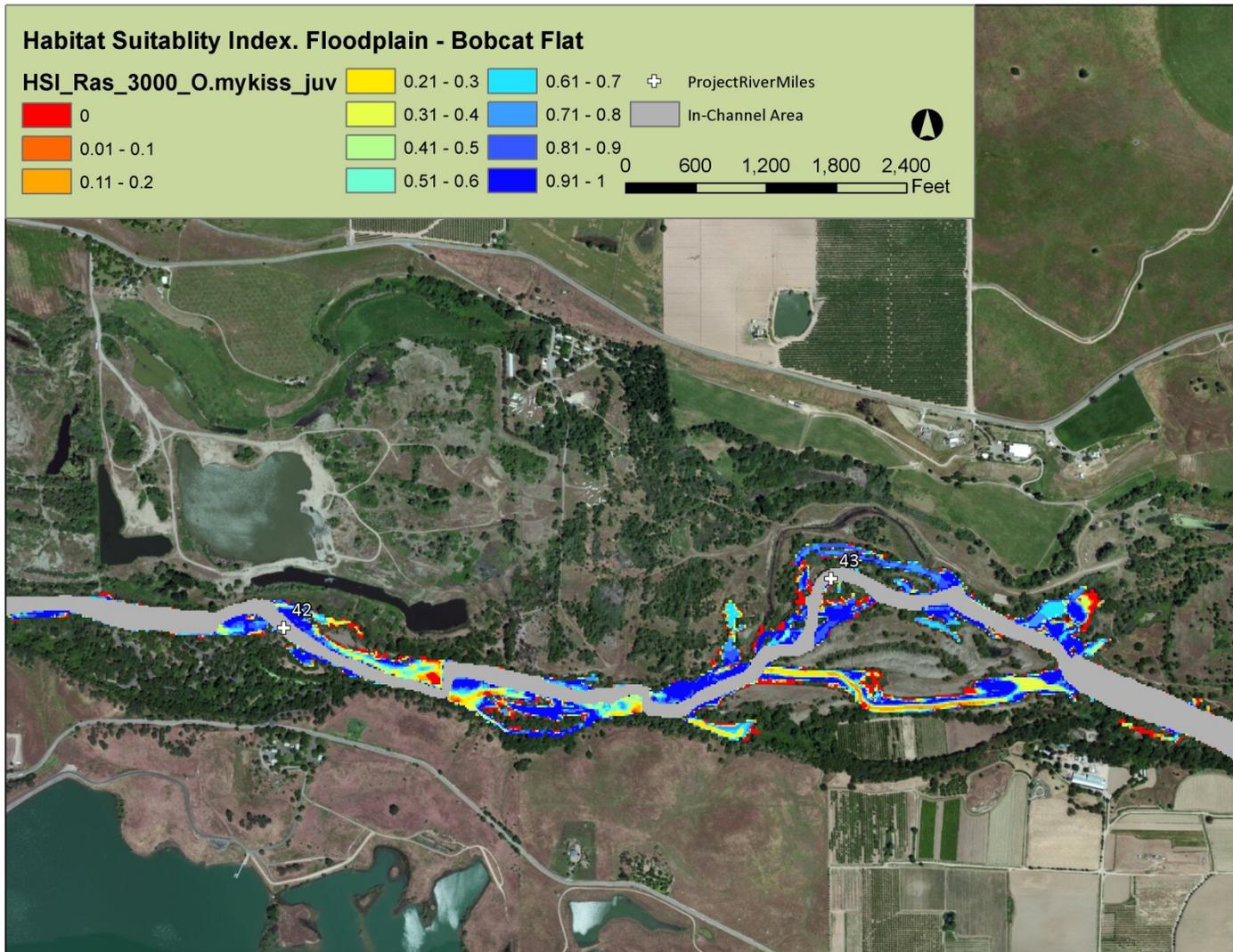
Figure 63. Example plot of joint *O. mykiss* fry habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.



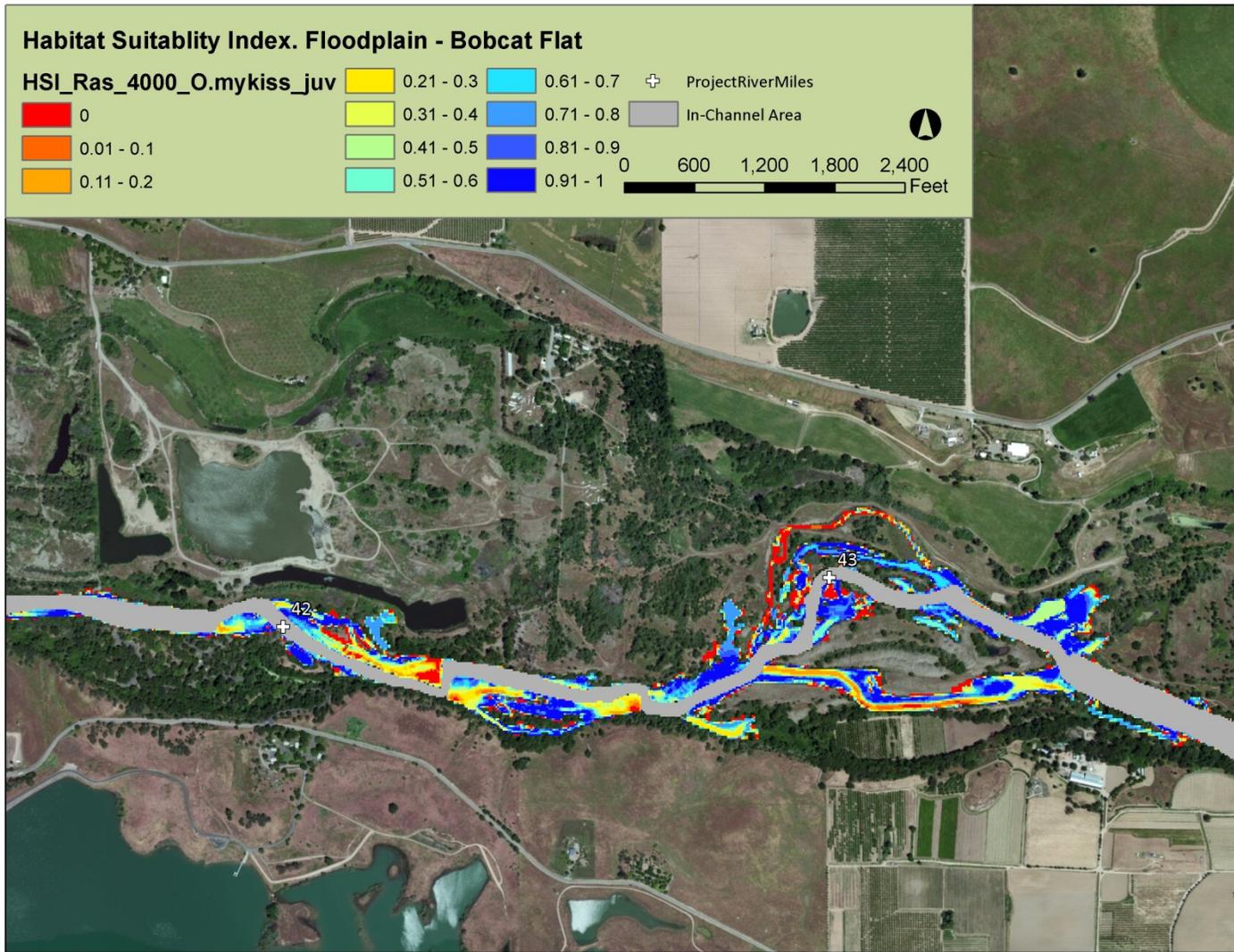
**Figure 64. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 1,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



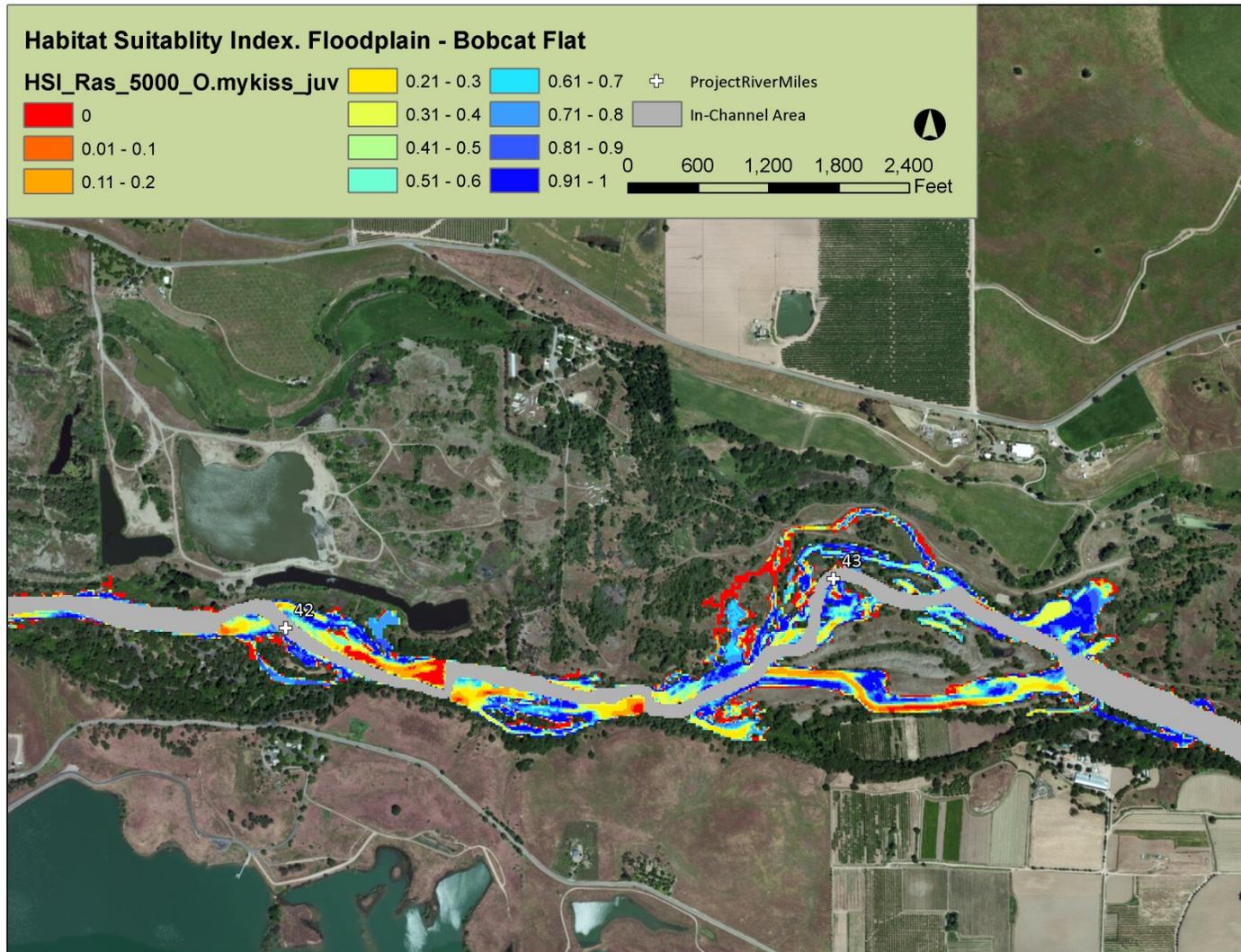
**Figure 65. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 2,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 66. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 3,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 67. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 4,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 68.** Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 5,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.

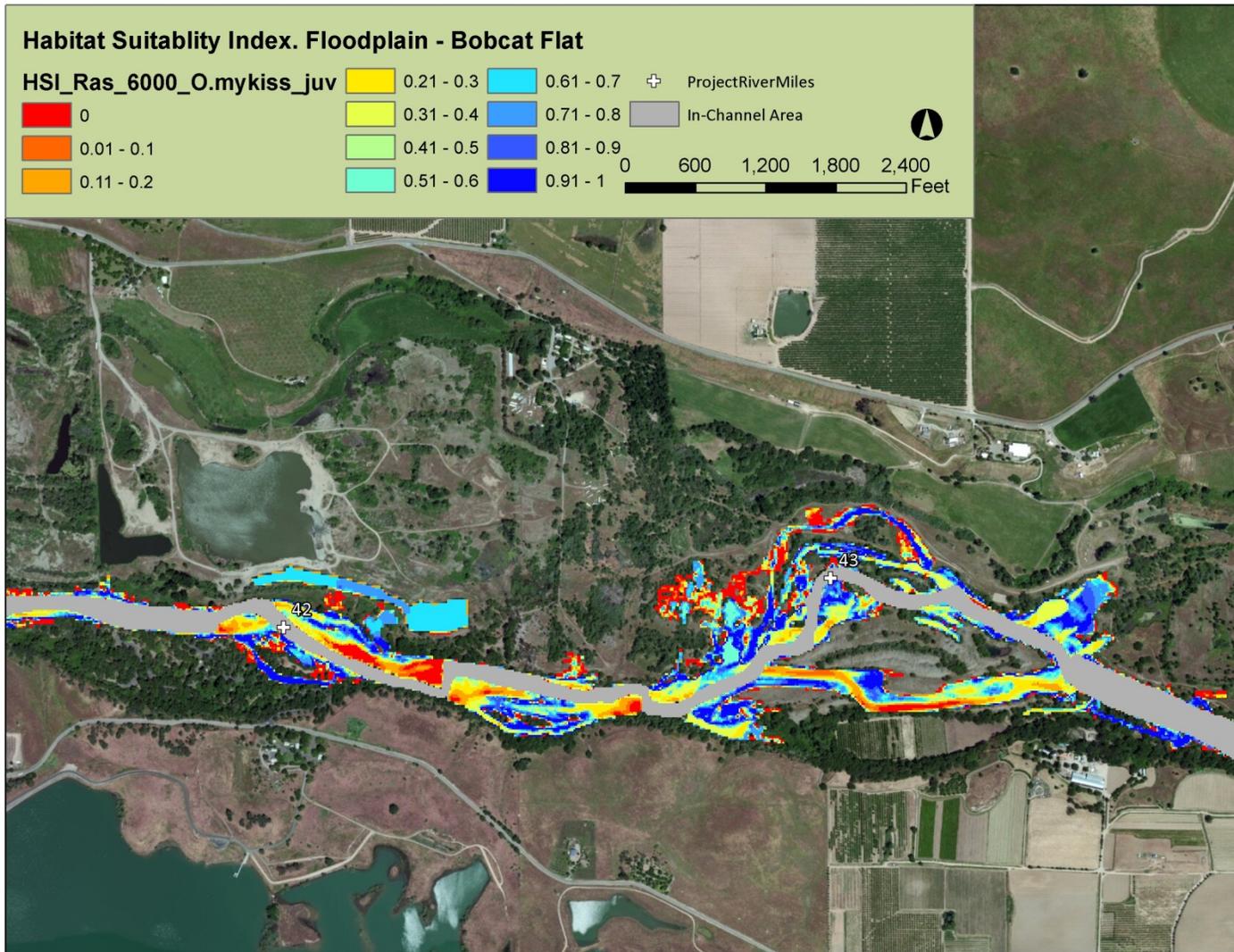
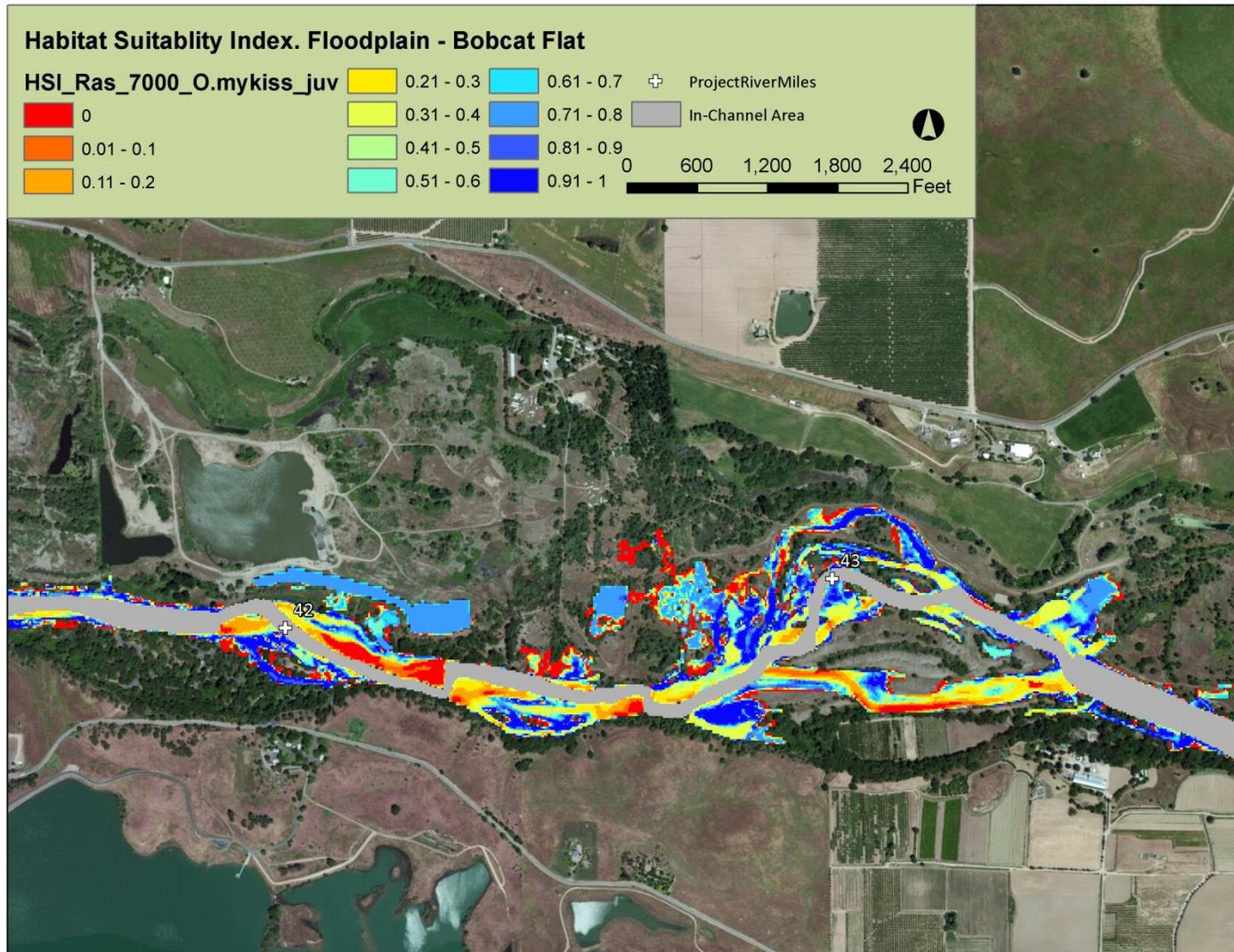
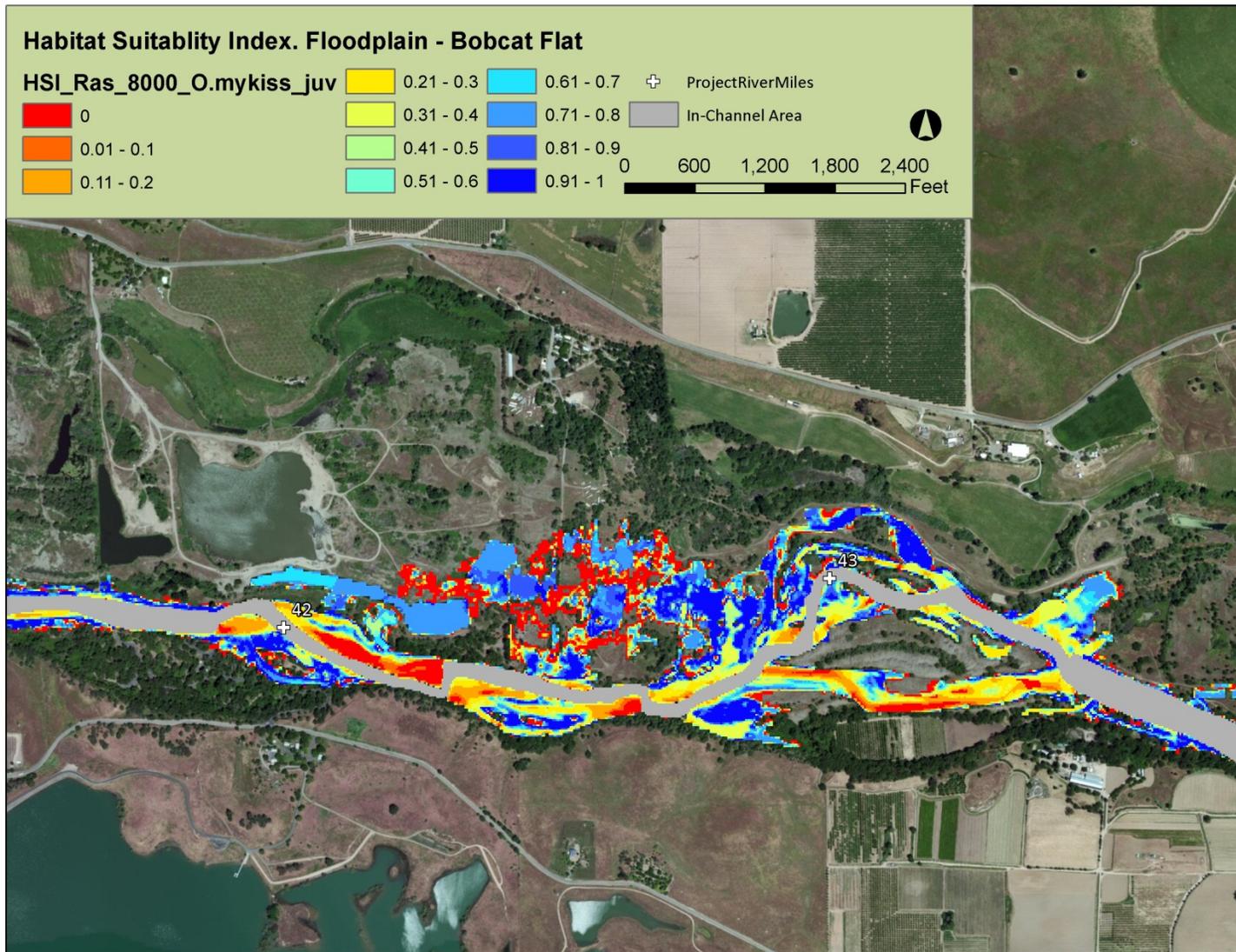


Figure 69. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 6,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.



**Figure 70. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 7,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**



**Figure 71. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 8,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.**

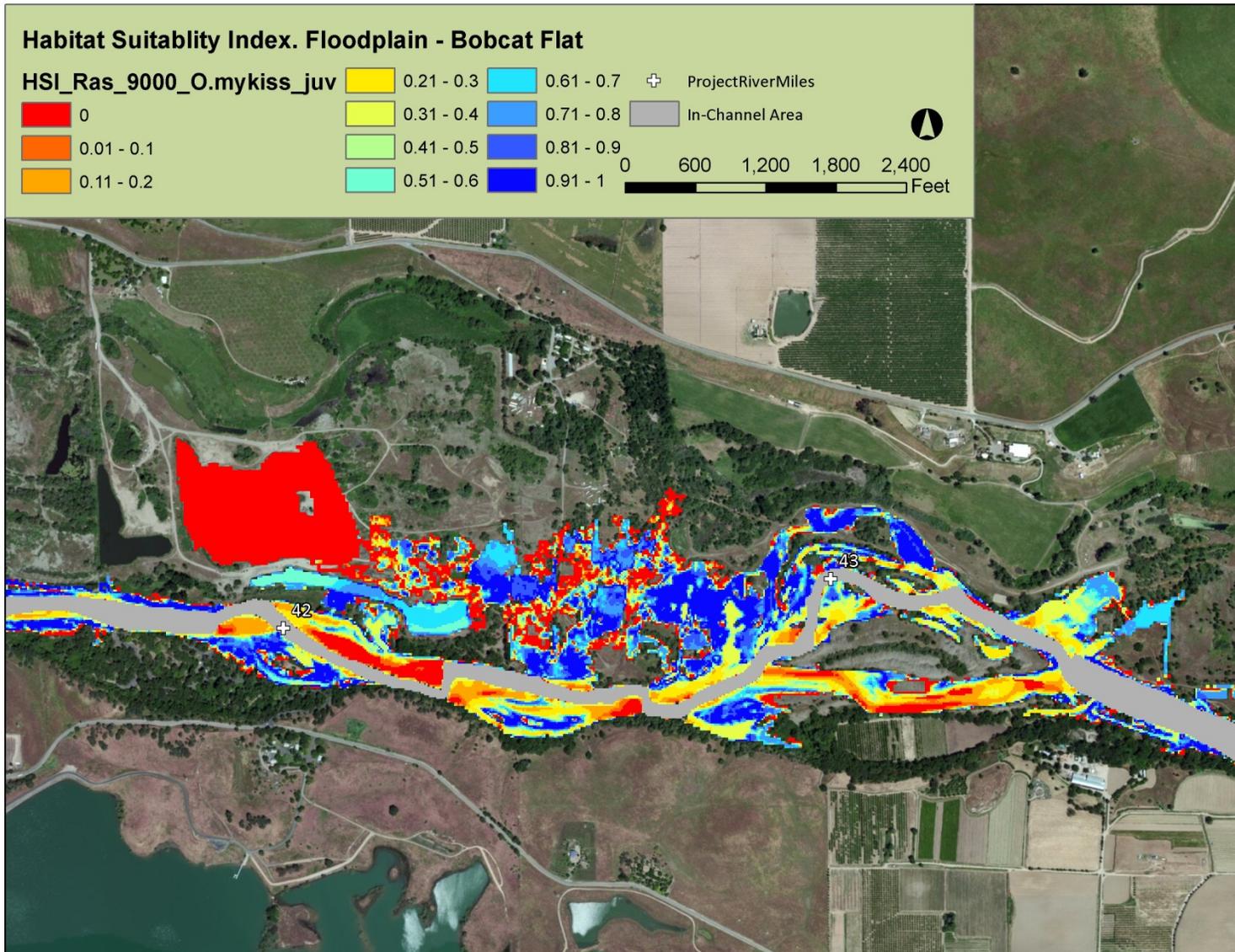


Figure 72. Example plot of joint *O. mykiss* juvenile habitat suitability at modeled floodplain depths and velocities for 9,000 cfs at Bobcat Flat (RM 43) along the lower Tuolumne River.