APPENDIX H

Appendix H, Table 1
Acronyms and Abbreviations Used in Appendix "H"

Acronym or Abbreviation	Definition
BCA	San Joaquin River at Banta Carbona
C18/C16	San Joaquin River at Shipping Channel Markers (2 Receivers)
CHP	Chipps Island
CHPE	Chipps Island East Receivers
CHPW	Chipps Island West Receivers
CVP	Central Valley Project Trash Rack
CVPtank	Central Valley Project Holding Tank
DF	San Joaquin River at Durham Ferry
DFD	San Joaquin River Downstream of Durham Ferry
FRE	False River East Receiver
FRW	False River West Receiver
JPTE or JPE	Jersey Point East Receiver
JPTW or JPW	Jersey Point West Receiver
MFE	San Joaquin River at Medford Island, East Receiver
MFW	San Joaquin River at Medford Island, West Receiver
MOS	San Joaquin River at Mossdale
MRN	Middle River North (2 Receivers)
MRND	Middle River North, Downstream Receiver
MRNU	Middle River North, Upstream Receiver
MRS	Middle River South
OR	Old River
ORE	Old River East
ORED	Old River Downstream
OREU	Old River East Upstream
ORN	Old River North (2 Receivers)
ORND	Old River North, Downstream Receiver
ORNU	Old River North, Upstream Receiver
ORS	Old River South (2 Receivers)
ORSD	Old River South, Downstream Receiver
ORSU	Old River South, Upstream Receiver
PCO	Paradise Cut
RGD	Radial Gates at Clifton Court Forebay, Interior (2 Receivers)
RGD1	Radial Gates at Clifton Court Forebay, Interior Receiver 1
RGD2	Radial Gates at Clifton Court Forebay, Interior Receiver 2
RGU	Radial Gates at Clifton Court Forebay, Entrance Channel
RGU1	Radial Gates at Clifton Court Forebay, Entrance Channel, Receiver 1
RGU2	Radial Gates at Clifton Court Forebay, Entrance Channel, Receiver 2
SJ1/SJ2	San Joaquin River at Lathrop (2 Receivers)
SJL	San Joaquin River at Lathrop
SJLD	San Joaquin River at Lathrop Downstream Receiver
SJLU	San Joaquin River at Lathrop Upstream Receiver
STK	San Joaquin River at Stockton
STN	San Joaquin River at Navy Bridge near Stockton
STS	San Joaquin River at USGS Gauge at Stockton
TCN/TCS	San Joaquin River at Turner Cut (2 Receivers)
TMN/TMS	Threemile Slough (2 Receivers)

Appendix H, Table 2
Definitions of Parameters Used in the Release-Recapture Survival Model Shown in Chapter 5

Parameter	Definition
S_{A2}	Probability of survival from Durham Ferry Downstream (DFD) to Banta Carbona (BCA)
S_{A3}	Probability of survival from Banta Carbona (BCA) to Paradise Cut (PCO)
S_{A4}	Probability of survival from Paradise Cut to Mossdale (MOS)
S_{A5}	Probability of survival from Mossdale (MOS) to Lathrop (SJL) or Old River East (ORE)
S_{A6}	Probability of survival from Lathrop (SJL) to Stockton USGS Gauge (STS)
S_{A7}	Probability of survival from Stockton USGS Gauge (STS) to Stockton Navy Drive Bridge (STN)
S_{A8}	Probability of survival from Stockton Navy Drive Bridge (STN) to Shipping Channel Markers (C18/C16) or Turner Cut (TCN/TCS)
S_{B1}	Probability of survival from Old River East (ORE) to Old River South (ORS)
ψ_{A1}	Probability of remaining in the San Joaquin River at the junction with Paradise Cut; assumed = 1
ψ_{A2}	Probability of remaining in the San Joaquin River at the head of Old River; = 1 - ψ_{B2}
ψ_{A3}	Probability of remaining in the San Joaquin River at the junction with Turner Cut; = 1 - ψ_{F3}
ψ_{B2}	Probability of entering Old River at the head of Old River; = 1 - ψ_{A2}
ψ_{B3}	Probability of remaining in Old River at the head of Middle River; = 1 - ψ_{C3}
ψ_{C3}	Probability of entering Middle River at the head of Middle River; = 1 - ψ_{B3}
ψ_{F3}	Probability of entering Turner Cut at the junction with the San Joaquin River; = 1 - ψ_{A3}
ψ_{G1}	Probability of moving downriver in the San Joaquin River at the Jersey Point/False River junction; = 1 - ψ_{H1}
ψ_{H1}	Probability of entering False River at the Jersey Point/False River junction; = 1 - ψ_{G1}
$\phi_{A1,A2}$	Joint probability of moving from Durham Ferry release site downstream toward DFD, and surviving to DFD
$\phi_{A8,G2}$	Overall survival from MFE/MFW to Chipps Island (CHPE/CHPW)
$\phi_{A9,A10}$	Joint probability of moving from C18/C16 toward MFE/MFW, and surviving from C18/C16 to MFE/MFW
$\phi_{A10,GH}$	Joint probability of moving from MFE/MFW toward Jersey Point (JPTE/JPTW) or False River (FRE/FRW), and surviving to JPTE/JPTW or FRE/FRW
$\phi_{A10,G2}$	Joint probability of moving from MFE/MFW toward Chipps Island (CHPE/CHPW), and surviving from MFE/MFW to CHPE/CHPW
$\phi_{B1,B2}$	Joint probability of moving from ORE toward ORS, and surviving from ORE to ORS
$\phi_{B2,B3}$	Joint probability of moving from ORS toward ORN, and surviving from ORS to ORN
$\phi_{B2,C2}$	Joint probability of moving from ORS toward MRN, and surviving from ORS to MRN
$\phi_{B2,D1}$	Joint probability of moving from ORS toward RGU, and surviving from ORS to RGU
$\phi_{B2,E1}$	Joint probability of moving from ORS toward CVP, and surviving from ORS to CVP
$\phi_{B2,G2}$	Overall survival from ORS to Chipps Island (CHPE/CHPW)
$\phi_{B3,GH}$	Joint probability of moving from ORN toward Jersey Point (JPTE/JPTW) or False River (FRE/FRW), and surviving from ORN to JPTE/JPTW or FRE/FRW
$\phi_{B3,G2}$	Joint probability of moving from ORN toward Chipps Island (CHPE/CHPW), and surviving from ORN to CHPE/CHPW
$\phi_{C1,B3}$	Joint probability of moving from MRS toward ORN, and surviving from MRS to ORN
$\phi_{C1,C2}$	Joint probability of moving from MRS toward MRN, and surviving from MRS to MRN
$\phi_{C1,D1}$	Joint probability of moving from MRS toward RGU, and surviving from MRS to RGU
$\phi_{C1,E1}$	Joint probability of moving from MRS toward CVP, and surviving from MRS to CVP
$\phi_{C1,G2}$	Overall survival from MRS to Chipps Island (CHPE/CHPW)
$\phi_{C2,GH}$	Joint probability of moving from MRN toward Jersey Point (JPTE/JPTW) or False River (FRE/FRW), and surviving from MRN to JPTE/JPTW or FRE/FRW
$\phi_{C2,G2}$	Joint probability of moving from MRN toward Chipps Island (CHPE/CHPW), and surviving from MRN to CHPE/CHPW
$\phi_{D1,D2}$	Joint probability of moving from RGU toward RGD, and surviving from RGU to RGD
$\phi_{D2,G2}$	Joint probability of moving from RGD toward Chipps Island (CHPE/CHPW) and surviving from RGU to CHPE/CHPW
$\phi_{E1,E2}$	Joint probability of moving from CVP toward CVPtank, and surviving from CVP to CVPtank
$\phi_{E2,G2}$	Joint probability of moving from CVPtank toward Chipps Island (CHPE/CHPW) and surviving from CVPtank to CHPE/CHPW

Appendix H, Table 2 (Continued)
Definitions of Parameters Used in the Release-Recapture Survival Model Shown in Chapter 5

Parameter	Definition
$\phi_{F1,GH}$	Joint probability of moving from TCN/TCS toward Jersey Point (JPTE/JPTW) or False River (FRE/FRW), and surviving to JPTE/JPTW or FRE/FRW
$\phi_{F1,G2}$	Joint probability of moving from TCN/TCS toward Chipps Island (CHPE/CHPW), and surviving to CHPE/CHPW
$\phi_{G1,G2}$	Joint probability of moving from JPE/JPW toward Chipps Island (CHPE/CHPW), and surviving to CHPE/CHPW
P_{A2}	Conditional probability of detection at DFD
P_{A3}	Conditional probability of detection at BCA
P_{A4}	Conditional probability of detection at PCO
P_{A5}	Conditional probability of detection at MOS
P_{A6}	Conditional probability of detection at SJL (either SJLU or SJLD)
P_{A7}	Conditional probability of detection at STS
P_{A8}	Conditional probability of detection at STN
P_{A9}	Conditional probability of detection at either C18 or C16
P_{A10a}	Conditional probability of detection at MFE
P_{A10b}	Conditional probability of detection at MFW
P_{B1}	Conditional probability of detection at ORE (either OREU or ORED)
P_{B2a}	Conditional probability of detection at ORSU
P_{B2b}	Conditional probability of detection at ORSD
P_{B3a}	Conditional probability of detection at ORNU
P_{B3b}	Conditional probability of detection at ORND
P_{C1}	Conditional probability of detection at MRS
P_{C2a}	Conditional probability of detection at MRNU
P_{C2b}	Conditional probability of detection at MRND
P_{D1}	Conditional probability of detection at RGU (either RGU1 or RGU2)
P_{D2a}	Conditional probability of detection at RGD1
P_{D2b}	Conditional probability of detection at RGD2
P_{E1}	Conditional probability of detection at CVP
P_{F1a}	Conditional probability of detection at TCN
P_{F1b}	Conditional probability of detection at TCS
P_{G1a}	Conditional probability of detection at JPTE
P_{G1b}	Conditional probability of detection at JPTW
P_{G2a}	Conditional probability of detection at CHPE
P_{G2b}	Conditional probability of detection at CHPW
P_{H1a}	Conditional probability of detection at FRW
P_{H1b}	Conditional probability of detection at FRE

Appendix H, Table 3
Parameter Estimates (Standard Errors in Parentheses) for Tagged Juvenile Chinook Salmon Released in 2011, Excluding Predator-type Detections. Parameters Without Standard Errors Were Estimated at Fixed Values in the Model. Population-level Estimates Were Estimated from the Pooled Release Groups. Some Parameters Were Not Estimable Because of Sparse Data

Parameter	Release Occasion				Population Estimate
	1	2	3	4	
S_{A2}	0.99 (0.01)	0.99 (0.01)	0.94 (0.01)	0.96 (0.01)	0.97 (0.00)
S_{A3}	1.03 (0.02)	0.99 (0.01)	0.95 (0.02)	0.96 (0.02)	0.99 (0.01)
S_{A4}	0.96 (0.02)	0.96 (0.01)	0.92 (0.02)	0.92 (0.02)	0.94 (0.01)
S_{A5}	1.00 (0.00)	0.99 (0.01)	0.97 (0.01)	0.98 (0.01)	0.99 (0.00)
S_{A6}	0.92 (0.02)	0.89 (0.02)	0.85 (0.03)	0.85 (0.03)	0.88 (0.01)
S_{A7}	0.96 (0.01)	0.96 (0.01)	0.90 (0.02)	0.93 (0.02)	0.94 (0.01)
S_{A8}	0.63 (0.03)	0.62 (0.03)		0.55 (0.04)	0.59 (0.02)
S_{B1}		0.97 (0.01)	0.98 (0.02)	0.98 (0.01)	0.98 (0.01)
ψ_{A1}	1.00	1.00	1.00	1.00	1.00
ψ_{A2}	0.59 (0.02)	0.57 (0.02)	0.63 (0.03)	0.55 (0.03)	0.58 (0.01)
ψ_{A3}	0.73 (0.04)	0.81 (0.03)		0.91 (0.03)	0.79 (0.02)
ψ_{B2}	0.41 (0.02)	0.43 (0.02)	0.37 (0.03)	0.45 (0.03)	0.42 (0.01)
ψ_{B3}		0.98 (0.01)	0.98 (0.01)	1.00	0.99 (0.01)
ψ_{C3}		0.02 (0.01)	0.02 (0.01)	0.00	0.01 (0.01)
ψ_{F3}	0.27 (0.04)	0.19 (0.03)		0.09 (0.03)	0.21 (0.02)
ψ_{G1}	0.80 (0.18)			1.00	0.93 (0.07)
ψ_{H1}	0.20 (0.18)			0.00	0.07 (0.07)
$\phi_{A1,A2}$	0.98 (0.01)	0.99 (0.01)	0.97 (0.01)	0.96 (0.01)	0.97 (0.00)
$\phi_{A8,G2}$	0.02 (0.01)	0.005 (0.005)	0.02 (0.01)	0.01 (0.01)	0.01 (0.00)
$\phi_{A9,A10}$	0.58 (0.05)	0.31 (0.05)		0.44 (0.06)	0.40 (0.03)
$\phi_{A10,GH}$	0.06 (0.03)			0.06 (0.04)	0.08 (0.02)
$\phi_{A10,G2}$	0.05 (0.04)	0.03 (0.03)		0.03 (0.03)	0.05 (0.02)
$\phi_{B1,B2}$	0.97 (0.01)	0.96 (0.02)	0.96 (0.02)	0.98 (0.01)	0.97 (0.01)
$\phi_{B2,B3}$	0.32 (0.03)	0.27 (0.03)		0.00	0.16 (0.01)
$\phi_{B2,C2}$	0.00	0.01 (0.01)		0.01 (0.01)	0.003 (0.002)
$\phi_{B2,D1}$	0.21 (0.03)	0.22 (0.03)		0.41 (0.04)	0.29 (0.02)
$\phi_{B2,E1}$	0.17 (0.03)	0.13 (0.03)		0.33 (0.04)	0.23 (0.02)
$\phi_{B2,G2}$	0.004 (0.005)	0.02 (0.01)	0.06 (0.02)	0.07 (0.02)	0.04 (0.01)
$\phi_{B3,GH}$	0.02 (0.02)				0.02 (0.01)
$\phi_{B3,G2}$	0.01 (0.02)	0.00			0.01 (0.01)
$\phi_{C1,B3}$		0.33 (0.27)			0.22 (0.16)
$\phi_{C1,C2}$		0.33 (0.27)			0.11 (0.11)
$\phi_{C1,D1}$		0.33 (0.27)			0.40 (0.18)
$\phi_{C1,E1}$		0.00			0.00
$\phi_{C1,G2}$		0.00 (0.00)	0.50 (0.36)		0.01 (0.00)
$\phi_{C2,GH}$				0.00	0.00
$\phi_{C2,G2}$		0.00		0.00	0.00
$\phi_{D1,D2}$	0.78 (0.07)	0.78 (0.07)	0.87 (0.05)	0.69 (0.06)	0.77 (0.03)
$\phi_{D2,G2}$	0.00	0.00	0.03 (0.03)	0.00	0.02 (0.01)
$\phi_{E1,E2}$	0.00	0.33 (0.10)	0.23 (0.07)	0.31 (0.06)	0.23 (0.03)
$\phi_{E2,G2}$		0.50 (0.18)	0.56 (0.17)	0.71 (0.11)	0.62 (0.08)
$\phi_{F1,GH}$	0.00			0.00	0.00
$\phi_{F1,G2}$	0.00	0.00		0.00	0.00
$\phi_{G1,G2}$	1.00 (0.5)			0.50 (0.35)	0.69 (0.13)

continued

Appendix H, Table 3 (continued)
Parameter Estimates (Standard Errors in Parentheses) for Tagged Juvenile Chinook Salmon Released in 2011, Excluding Predator-type Detections. Parameters Without Standard Errors Were Estimated at Fixed Values in the Model. Population-level Estimates Were Estimated from the Pooled Release Groups. Some Parameters Were Not Estimable Because of Sparse Data

Parameter	Release Occasion				Population Estimate
	1	2	3	4	
P_{A2}	1.00 (0.00)	0.96 (0.01)	0.90 (0.01)	0.98 (0.01)	0.96 (0.00)
P_{A3}	0.93 (0.01)	0.91 (0.01)	0.88 (0.02)	0.91 (0.01)	0.91 (0.01)
P_{A4}	0.15 (0.02)	0.41 (0.02)	0.39 (0.03)	0.43 (0.03)	0.34 (0.01)
P_{A5}	0.92 (0.01)	0.86 (0.02)	0.80 (0.02)	0.90 (0.02)	0.87 (0.01)
P_{A6}	0.96 (0.01)	1.00 (0.00)	0.91 (0.02)	0.98 (0.01)	0.96 (0.01)
P_{A7}	0.96 (0.01)	0.93 (0.02)	0.88 (0.02)	0.96 (0.02)	0.93 (0.01)
P_{A8}	0.99 (0.01)	0.99 (0.01)	1.00	0.98 (0.02)	0.99 (0.01)
P_{A9}	1.00	1.00		1.00	0.99 (0.01)
P_{A10a}	0.93 (0.03)	0.97 (0.03)		0.91 (0.05)	0.93 (0.02)
P_{A10b}	0.98 (0.02)	1.00		0.91 (0.05)	0.96 (0.02)
P_{B1}	0.97 (0.01)	0.96 (0.01)	0.96 (0.02)	0.99 (0.01)	0.97 (0.01)
P_{B2a}	0.88 (0.02)	0.91 (0.02)	0.87 (0.03)	0.93 (0.02)	0.9 (0.01)
P_{B2b}	0.94 (0.02)	0.98 (0.01)	0.95 (0.02)	0.97 (0.01)	0.96 (0.01)
P_{B3a}	1.00	1.00		1.00	0.99 (0.01)
P_{B3b}	0.79 (0.05)	0.86 (0.05)		1.00	0.81 (0.04)
P_{C1}		1.00	1.00	1.00	0.76 (0.23)
P_{C2a}	1.00	1.00		1.00	1.00
P_{C2b}	1.00	1.00		1.00	1.00
P_{D1}	0.97 (0.03)	1.00		0.76 (0.06)	0.85 (0.03)
P_{D2a}	0.96 (0.04)	0.96 (0.04)		0.98 (0.02)	0.98 (0.01)
P_{D2b}	0.96 (0.04)	0.87 (0.06)		1.00	0.97 (0.01)
P_{E1}	1.00	1.00		1.00	1.00
P_{F1a}	1.00	1.00		0.86 (0.13)	0.99 (0.01)
P_{F1b}	0.95 (0.03)	0.96 (0.04)		0.86 (0.13)	0.96 (0.02)
P_{G1a}	1.00			1.00	0.84 (0.11)
P_{G1b}	0.75 (0.22)			1.00	0.76 (0.12)
P_{G2a}	0.5 (0.35)	1.00	1.00	1.00	0.96 (0.04)
P_{G2b}	0.5 (0.35)	1.00	0.67 (0.14)	0.85 (0.1)	0.78 (0.07)
P_{H1a}	1.00			1.00	1.00
P_{H1b}	1.00			1.00	1.00

Appendix H, Table 4
Parameter Estimates (Standard Errors in Parentheses) for Tagged Juvenile Chinook Salmon Released in 2010, Including Predator-type Detections. Parameters Without Standard Errors Were Estimated at Fixed Values in the Model. Population-level Estimates Were Estimated from the Pooled Release Groups. Some Parameters Were Not Estimable Because of Sparse Data

Parameter	Release Occasion				Population Estimate
	1	2	3	4	
S_{A2}	0.99 (0.00)	0.99 (0.01)	0.94 (0.01)	0.96 (0.01)	0.97 (0.00)
S_{A3}	1.04 (0.03)	1.00 (0.01)	0.94 (0.02)	0.95 (0.02)	0.99 (0.01)
S_{A4}	0.95 (0.03)	0.96 (0.01)	0.93 (0.02)	0.92 (0.02)	0.94 (0.01)
S_{A5}	0.98 (0.01)	0.98 (0.01)	0.96 (0.01)	0.98 (0.01)	0.97 (0.00)
S_{A6}	0.95 (0.01)	0.91 (0.02)	0.88 (0.02)	0.86 (0.03)	0.90 (0.01)
S_{A7}	0.96 (0.01)	0.97 (0.02)	0.9 (0.02)	0.97 (0.03)	0.96 (0.01)
S_{A8}	0.64 (0.03)	0.64 (0.03)		0.54 (0.04)	0.60 (0.02)
S_{B1}	0.99 (0.01)	0.97 (0.01)	0.97 (0.02)	0.98 (0.01)	0.98 (0.01)
ψ_{A1}	1.00	1.00	1.00	1.00	1.00
ψ_{A2}	0.58 (0.02)	0.56 (0.02)	0.62 (0.03)	0.57 (0.03)	0.58 (0.01)
ψ_{A3}	0.73 (0.04)	0.82 (0.03)		0.91 (0.03)	0.79 (0.02)
ψ_{B2}	0.42 (0.02)	0.44 (0.02)	0.38 (0.03)	0.43 (0.03)	0.42 (0.01)
ψ_{B3}	0.99 (0.01)	0.98 (0.01)	0.98 (0.01)	1.00	0.98 (0.01)
ψ_{C3}	0.01 (0.01)	0.02 (0.01)	0.02 (0.01)	0.00	0.02 (0.01)
ψ_{F3}	0.27 (0.04)	0.18 (0.03)		0.09 (0.03)	0.21 (0.02)
ψ_{G1}	0.80 (0.18)			1.00	0.93 (0.06)
ψ_{H1}	0.20 (0.18)			0.00	0.07 (0.06)
$\phi_{A1,A2}$	0.99 (0.01)	0.98 (0.01)	0.97 (0.01)	0.97 (0.01)	0.98 (0.00)
$\phi_{A8,G2}$	0.02 (0.01)	0.01 (0.01)	0.02 (0.01)	0.01 (0.01)	0.01 (0.00)
$\phi_{A9,A10}$	0.55 (0.05)	0.31 (0.04)		0.45 (0.05)	0.39 (0.02)
$\phi_{A10,GH}$	0.06 (0.03)			0.05 (0.03)	0.08 (0.02)
$\phi_{A10,G2}$	0.05 (0.04)	0.04 (0.04)		0.05 (0.03)	0.06 (0.02)
$\phi_{B1,B2}$	0.98 (0.01)	0.95 (0.02)	0.95 (0.02)	0.98 (0.01)	0.96 (0.01)
$\phi_{B2,B3}$	0.31 (0.04)	0.28 (0.04)		0.00	0.17 (0.02)
$\phi_{B2,C2}$	0.00	0.01 (0.01)		0.01 (0.01)	0.003 (0.002)
$\phi_{B2,D1}$	0.24 (0.03)	0.22 (0.03)		0.41 (0.04)	0.29 (0.02)
$\phi_{B2,E1}$	0.22 (0.03)	0.19 (0.03)		0.35 (0.04)	0.27 (0.02)
$\phi_{B2,G2}$	0.004 (0.005)	0.03 (0.01)	0.06 (0.02)	0.07 (0.02)	0.04 (0.01)
$\phi_{B3,GH}$	0.02 (0.02)				0.03 (0.02)
$\phi_{B3,G2}$	0.01 (0.02)	0.00			0.02 (0.01)
$\phi_{C1,B3}$	0.00	0.27 (0.23)			0.30 (0.15)
$\phi_{C1,C2}$	0.00	0.27 (0.23)			0.09 (0.09)
$\phi_{C1,D1}$	0.51 (0.36)	0.47 (0.27)			0.50 (0.17)
$\phi_{C1,E1}$	0.00	0.00			0.00
$\phi_{C1,G2}$	0.00 (0.00)	0.01 (0.01)	0.50 (0.36)		0.02 (0.01)
$\phi_{C2,GH}$				0.00	0.00
$\phi_{C2,G2}$		0.00		0.00	0.00
$\phi_{D1,D2}$	0.91 (0.04)	0.88 (0.05)	0.94 (0.04)	0.70 (0.06)	0.85 (0.03)
$\phi_{D2,G2}$	0.00	0.03 (0.03)	0.03 (0.03)	0.00	0.02 (0.01)
$\phi_{E1,E2}$	0.00	0.23 (0.07)	0.24 (0.06)	0.33 (0.06)	0.21 (0.03)
$\phi_{E2,G2}$		0.50 (0.18)	0.50 (0.16)	0.63 (0.11)	0.58 (0.08)
$\phi_{F1,GH}$	0.00			0.00	0.00
$\phi_{F1,G2}$	0.00	0.00		0.00	0.00
$\phi_{G1,G2}$	1.00 (0.5)			1.00	0.74 (0.13)

continued

Appendix H, Table 4 (continued)
Parameter Estimates (Standard Errors in Parentheses) for Tagged Juvenile Chinook Salmon Released in 2010, Including Predator-type Detections. Parameters Without Standard Errors Were Estimated at Fixed Values in the Model. Population-level Estimates Were Estimated from the Pooled Release Groups. Some Parameters Were Not Estimable Because of Sparse Data

Parameter	Release Occasion				Population Estimate
	1	2	3	4	
P_{A2}	1.00 (0.00)	0.96 (0.01)	0.90 (0.01)	0.96 (0.01)	0.96 (0.00)
P_{A3}	0.93 (0.01)	0.91 (0.01)	0.88 (0.02)	0.89 (0.02)	0.90 (0.01)
P_{A4}	0.15 (0.02)	0.41 (0.02)	0.39 (0.03)	0.42 (0.03)	0.33 (0.01)
P_{A5}	0.92 (0.01)	0.86 (0.02)	0.80 (0.02)	0.88 (0.02)	0.87 (0.01)
P_{A6}	0.96 (0.01)	1.00 (0.00)	0.91 (0.02)	0.94 (0.02)	0.95 (0.01)
P_{A7}	0.96 (0.01)	0.93 (0.02)	0.89 (0.02)	0.92 (0.02)	0.93 (0.01)
P_{A8}	0.98 (0.01)	0.98 (0.01)	1.00	0.93 (0.03)	0.97 (0.01)
P_{A9}	1.00	1.00		1.00	0.99 (0.01)
P_{A10a}	0.92 (0.03)	0.94 (0.04)		0.95 (0.04)	0.93 (0.02)
P_{A10b}	1.00	1.00		0.95 (0.04)	0.97 (0.01)
P_{B1}	0.97 (0.01)	0.96 (0.01)	0.96 (0.02)	0.99 (0.01)	0.97 (0.01)
P_{B2a}	0.88 (0.02)	0.90 (0.02)	0.87 (0.03)	0.93 (0.02)	0.90 (0.01)
P_{B2b}	0.94 (0.02)	0.97 (0.01)	0.95 (0.02)	0.97 (0.01)	0.96 (0.01)
P_{B3a}	0.85 (0.05)	0.85 (0.06)		1.00	0.84 (0.04)
P_{B3b}	0.76 (0.06)	0.83 (0.06)		1.00	0.79 (0.04)
P_{C1}	1.00	0.80 (0.24)	1.00	1.00	0.62 (0.18)
P_{C2a}	1.00	1.00		1.00	1.00
P_{C2b}	1.00	1.00		1.00	1.00
P_{D1}	0.98 (0.02)	0.97 (0.03)		0.76 (0.06)	0.86 (0.03)
P_{D2a}	0.97 (0.03)	0.97 (0.03)		0.98 (0.02)	0.98 (0.01)
P_{D2b}	0.92 (0.04)	0.85 (0.06)		1.00	0.95 (0.02)
P_{E1}	1.00	1.00		1.00	1.00
P_{F1a}	0.95 (0.04)	1.00		0.87 (0.12)	0.97 (0.02)
P_{F1b}	0.92 (0.04)	0.96 (0.04)		0.87 (0.12)	0.95 (0.02)
P_{G1a}	1.00			1.00	0.85 (0.1)
P_{G1b}	0.75 (0.22)			1.00	0.78 (0.11)
P_{G2a}	0.5 (0.35)	0.83 (0.15)	1.00	1.00	0.93 (0.05)
P_{G2b}	0.5 (0.35)	1.00	0.67 (0.14)	0.79 (0.11)	0.76 (0.07)
P_{H1a}	1.00			1.00	1.00
P_{H1b}	1.00			1.00	1.00