Supplemental Information

Table S1 Statistics describing the dynamics of larval dispersal in a network of 17 sites after PLD 14 days. Statistics include In-degree, out-degree, betweenness centrality and eigenvector centrality. At the bottom of the table, we show the coefficient of correlation (R^2) and the P values observed for each statistic when all sites were compared in a linear regression against the observed genetic diversity (corrected haplotype diversity).

PLD 14 days	In-	Out-	Betweenness
Site	degree	degree	centrality
1 Punta Refugio	2	1	3.167
2 Punta Diablo	1	3	11.367
3 La Ventana	0	6	28.8
4 Chorros	0	4	6.833
5 San Pedro Martir	3	2	0
6 San Lorenzo	3	1	0.5
7 Las Cuevitas	2	1	52
8 Puerto Libertad	1	1	28
9 Datil	5	2	6.933
10 La Tordilla	2	5	43.933
11 El Tecomate	3	1	26.067
12 San Esteban	6	4	30.367
13 Punta Roja	3	6	75.033
14 Los Machos	2	1	2.5
15 Puerto Lobos	1	0	0
16 La Poma	0	0	0
17 San Francisquito	4	0	0.5
R^2	0.1471	9.3E-06	0.0512
P value	0.2738	0.9933	0.5295

Table S2 Statistics describing the dynamics of larval dispersal in a network of 17 sites after PLD 21 days. Statistics include In-degree, out-degree, betweenness centrality and eigenvector centrality. At the bottom of the table, we show the coefficient of correlation (R^2) and the P values observed for each statistic when all sites were compared in a linear regression against the observed genetic diversity (corrected haplotype diversity).

PLD 21 days Site	In- Degree	Out- Degree	Betweenness centrality
1 Punta Refugio	3	1	30.333
2 Punta Diablo	2	6	29.165
3 La Ventana	0	6	16.521
4 Chorros	0	8	16.767
5 San Pedro Martir	5	6	8.014
6 San Lorenzo	3	0	0.333
7 Las Cuevitas	5	2	31.017
8 Puerto Libertad	2	1	3.533
9 Datil	7	4	3.794
10 La Tordilla	7	5	9.561
11 El Tecomate	8	2	31.877
12 San Esteban	4	6	4.667
13 Punta Roja	3	9	36.558
14 Los Machos	3	2	10.164
15 Puerto Lobos	2	0	0
16 La Poma	0	1	0
17 San Francisquito	5	0	1.697
R^2	0.0674	0.0359	0.0051
P value	0.4688	0.5998	0.8432

Table S3 Statistics describing the dynamics of larval dispersal in a network of 17 sites after PLD 28 days. Statistics include In-degree, out-degree, betweenness centrality and eigenvector centrality. At the bottom of the table, we show the coefficient of correlation (R^2) and the P values observed for each statistic when all sites were compared in a linear regression against the observed genetic diversity (corrected haplotype diversity).

PLD 28 days	In-	Out-	Betweenness
Site	Degree	Degree	centrality
1 Punta Refugio	2	1	0.25
2 Punta Diablo	2	8	22.333
3 La Ventana	0	8	13.05
4 Chorros	0	9	15.817
5 San Pedro Martir	4	6	6.817
6 San Lorenzo	5	3	1.805
7 Las Cuevitas	10	2	25.355
8 Puerto Libertad	6	1	6.633
9 Datil	7	5	2.538
10 La Tordilla	8	6	5.655
11 El Tecomate	9	2	5.655
12 San Esteban	4	6	1.683
13 Punta Roja	3	8	14.305
14 Los Machos	2	2	3.521
15 Puerto Lobos	2	0	0
16 La Poma	0	0	0
17 San Francisquito	3	0	0.583
\mathbf{R}^2	1.85E-06	0.0116	0.1173
P value	0.9970	0.7670	0.3324



Figure S1 Spatial units of analyses for studying connectivity in the Gulf of California. The map shows sites where virtual larvae was released and sites where genetic samples were also collected.



Figure S2 Modeled networks of larval connectivity for PLD 28 days for larvae release at two distinct dates. Spatial networks of larval dispersal between sites for PLD 28 days for larvae released in May 16th (A) and May 25th (B), showing dispersal events (links) between sites (nodes). Line width is proportional to probability according to the scale to the right. The direction of the larval dispersal events is indicated by different colors: northward (red), southward (blue) or both simultaneously (green). Open nodes are sites within MPAs, solid nodes are fished sites.