BACKGROUND
Despite the ecological, economic, social and human health benefits of local and diverse sources of seafood, over 90% of seafood consumed in California (and the U.S.) is imported, while much local catch is sent overseas. Further, diets are species poor with 56% of all seafood consumed in the U.S. coming from three species. Diversification of catch and more efficient use of local seafood can increase stability of local fisheries and food supply chains, and the benefits they reap. Attaining diverse fisheries is dependent on diverse supply and demand. The rich ethnic and cultural diversity in cities like San Diego, and the high biodiversity in coastal waters, gives tremendous potential for diverse market demand that could drive diversification of local fisheries.

GOAL
Identify and begin to address the barriers to getting locally sourced seafood from our waters to our plates. We leveraged San Diego’s ethnic diversity and desire for healthier lifestyles, and the Unified Port of San Diego Commercial Fisheries Revitalization Plan to fulfill four objectives.
1. Determine public demand and feasible supply of seafood needed to support a direct market.
2. Identify the main barriers to the public consuming (more) seafood and begin to address them.
3. Increase public awareness of the diversity of local fisheries by connecting the public and fishing community.
4. Identify species of emerging public interest in order to plan next steps before demand increases.

METHODS
We held two survey and tasting events at Tuna Harbor on 9/7/2013 for San Diego’s East African community (am) and foodie public (pm). We partnered with fishermen for local catch and to develop educational materials for each species profiled. Fishermen hosted an outreach table with live animals and one of the chef stations. Chefs, scientists, aquaculturists and nutritionists also hosted tables introducing local species. Over 250 people attended; 177 took the survey that collected data on diet and shopping habits, and awareness, demand and barriers to local direct seafood sales. A follow up survey 6-8 weeks later tested impacts of the event. On 12/16-17/2013 we interviewed 20 fishermen to identify potential supply and barriers to selling directly to the public. Five follow up events presented results, distributed materials and initiated interactions among the communities.

KEY FINDINGS
1. There is a supply and demand for San Diego seafood and direct markets, but public preferences do not align with local catch.
2. The main public barriers are unfamiliarity with local catch and habit of buying imported seafood; increasing familiarity with San Diego’s seafood producers and their products changed habits and increased adventurousness.
3. The main seafood producer barriers are lack of social capital and infrastructure, which can be overcome by collaboration among fishermen, high-level champions to help with meeting regulatory requirements and infrastructure, and grassroots economic and political support.
4. This project helped to launch San Diego’s first fishermen’s market through collection of supply and demand data, identification of barriers and initial efforts to overcome them, including strengthening connections among the public, fishermen, and other market stakeholders.
EXECUTIVE SUMMARY: FEASIBILITY OF URBAN COASTAL DIRECT SEAFOOD MARKETS

MAIN CONCLUSIONS

SEAFOOD SUPPLY EXISTS
Most (75%) fishermen sell or wish to sell directly at one or more of San Diego’s open air markets. They get 10-500% more for directly sold catch with highest increases for less-mainstream species (e.g., invertebrates, lingcod). A diversity of seafood is available every month with over 10 year-round and at least 20 seasonal species.

FISHERMEN’S BARRIERS
All fishermen agreed that the main barrier to directly marketing their products was the lack of social capital, namely producer-based groups committed to establishing a reliable and diverse seafood supply for sales, and to coordinating catch and sales to reduce competition, costs and effort associated with marketing. All fishermen agreed that lack of producer-owned and operated waterfront infrastructure, such as offloading, processing and storage facilities, was limiting direct sales. Most agreed that some current regulations, such as expensive, non-transferable fishing permits, and lack of permits for fishermen’s only markets limit direct marketing. It was acknowledged that strict regulations are also what makes local catch responsible and may be used to market products. Fishermen also noted the lack of personal sustainability; the inability to fish long days and then market, as a limitation.

SOLUTIONS FOR FISHERMEN
With long hours and individual operations, producers need help connecting with each other and marketing opportunities, securing producer-owned and operated waterfront infrastructure, and building grassroots support. Local media reporting on permitting challenges, and high-level, local champions were part of the solution to permitting snags that allowed the Tuna Harbor Dockside Market to open.

PUBLIC DEMAND EXISTS
San Diego wants fresh, eco-friendly, healthy seafood; knowledge of source; and to support the local economy and fishermen. Finfish topped the list of preferred San Diego products, but 25% or more were interested in every species landed in San Diego. Most (90%) were willing to pay more and ¾ were willing to travel 10-30 min for direct seafood. Most said they would visit a direct market at least once per month and buy a pound or more of seafood; and most were willing to try a new seafood if offered at a direct market.

SAN DIEGO’S SEAFOOD HABITS DON’T MATCH LOCAL CATCH

PUBLIC BARRIERS
The most obvious barrier was that our food habits do not match local catch (Fig. 1). The most commonly purchased seafood are largely imported into Southern California and include salmon, tuna and shrimp. Many people were unfamiliar with and had not tried most of San Diego’s local products, especially invertebrates and less-mainstream fish (Fig. 2). Other reasons given by the public for not eating more seafood were that it is too expensive and that fishing may harm the environment. Barriers to the public attending dockside markets on San Diego Bay were distance from home, not enough parking and inconvenient hours. People preferred weekend markets.

LOCAL SEAFOOD IS LARGELY UNFAMILIAR TO THE PUBLIC

TRYING A NEW SEAFOOD, EVEN ONCE, INCREASES COMFORT LEVELS

PUBLIC SOLUTIONS
Raising public awareness about San Diego’s environmentally, economically and socially responsible producers and products increased comfort (Fig. 3), preferences for, and value of local seafood, and nurtured adventurousness to try new seafood. We used collaboratively developed informative materials and interactive events (tastings, touch tanks, interactions with fishermen, scientists and chefs). Culturally-sensitive communication with a diversity of communities, and increased convenience and access to seafood will help to overcome many of the barriers to people choosing local seafood.

Fig. 1. The most common seafood consumed in San Diego (left cart), and some examples of common year round catch (right).

Fig. 2. % of attendees who tried local seafood species for the first time at the 9/7/13 event.

Fig. 3. Proportion of responses of people who were asked how willing they were to buy a seafood that they had tried for the first time 6-8 weeks earlier at the 9/7 event.