Chocolate Caramel Ice Cream

http://userealbutter.com/2014/04/23/chocolate-caramel-ice-cream-recipe/modified from this recipe

1 1/4 cups sugar (1 cup + 1/4 cup)
2 1/4 cups heavy cream (1 1/4 cups + 1 cup)
5 oz. bittersweet chocolate, chopped
1/2 tsp Maldon flake sea salt (or some other flake sea salt)
1 cup whole milk
5 egg yolks
1 tsp vanilla extract

Make the chocolate caramel: Heat 1 cup of sugar in a medium saucepan (I used a 3 qt. saucepan – don't use a shallow pan!) over medium heat. Stir it around until the edges begin to melt. Then stop stirring, but occasionally swirl the sugar in the pan to get it melt more evenly. When the sugar turns a deep amber color, stir in the 1 1/4 cups cream. It will bubble up like crazy, but keep stirring to incorporate the cream into the caramel. Continue to stir until the caramel is dissolved. Stir the chocolate and the salt into the caramel until the chocolate is melted. Pour the chocolate caramel into a large bowl and set aside.

Make the ice cream: Using the same pan (without washing it – score!), heat 1/4 cup sugar, 1 cup cream, and 1 cup milk. If there are any hardened bits of caramel in the pan, keep the heat on medium low and keep stirring until the caramel dissolves into the liquid (it may take a while, but it will happen). Place the egg yolks in a medium bowl. When the cream-milk mixture is hot (steaming), whisk a half cup into the egg yolks. Whisk in another half cup until incorporated. Whisk in the remaining liquid. Scrape the egg-cream-milk mixture back into the saucepan and set on medium heat while constantly stirring the bottom and corners of the pan until the custard thickens (takes a few minutes or more). Strain the custard through a fine-mesh sieve into the chocolate caramel and stir until combined. Stir in the vanilla extract. Cover with plastic wrap and chill thoroughly in the refrigerator. Churn the custard according to your ice cream manufacturer's instructions. Pack the soft ice cream into a vessel and freeze. Makes 1 quart.