**Total territorial water is 310 km2**

**Scenarios we want to run:**

1. BAU
2. Catch limit
3. 20% MR
4. 30% MR
5. Size limit
6. Size limit+Reserve

**What we know about silk snapper:**

M yr-1 = 0.23

M insta= 0.26

Lbar estimation of F is: 0.28

Catch MSY: B2015/K= 0.48,

F/Fmsy=0.5

We want to figure out what the current harvest rate (u) for our BAU scenario, so we calculate using F and M:





So our U we say:

Z= 0.28 + 0.26 = 0.54

S=exp^-(0.54)= 0.58

A= 1- 0.58=0.42

U= 0.28\*0.42/0.54 = 0.22

Now I try and run the model with this harvest rate instead of whatever it was optimizing for. However, this changes what my assumed b/k was….

**Problems/ Questions:**

* What is the estimation of harvest rate optimizing for? Is it dynamic? To get to Bmsy? And changes based on selectivity?
* Should I be setting the initial biomass to figure out what F that makes sense for? When I try and set u, the starting biomass changes dramatically.
* Are my interpretations of scenarios correct?
* What are the differences between the u1 and u2 opt harvest rates and the OArates?
* What does distance offshore do?
* What does max yield mean? MSY?
* I think the graphs were only plotting local biomass bc under 30% MR the yield was zero