

# Map 1

1 square = ●  
1 x 1 cm, which  
represents 100 m x 100 m.

100 m x 100 m =  
10,000 m<sup>2</sup> or 1 hectare.

*Precipitation 1* ●  
Precipitation falls on the  
map area at a rate of 1  
m/yr.

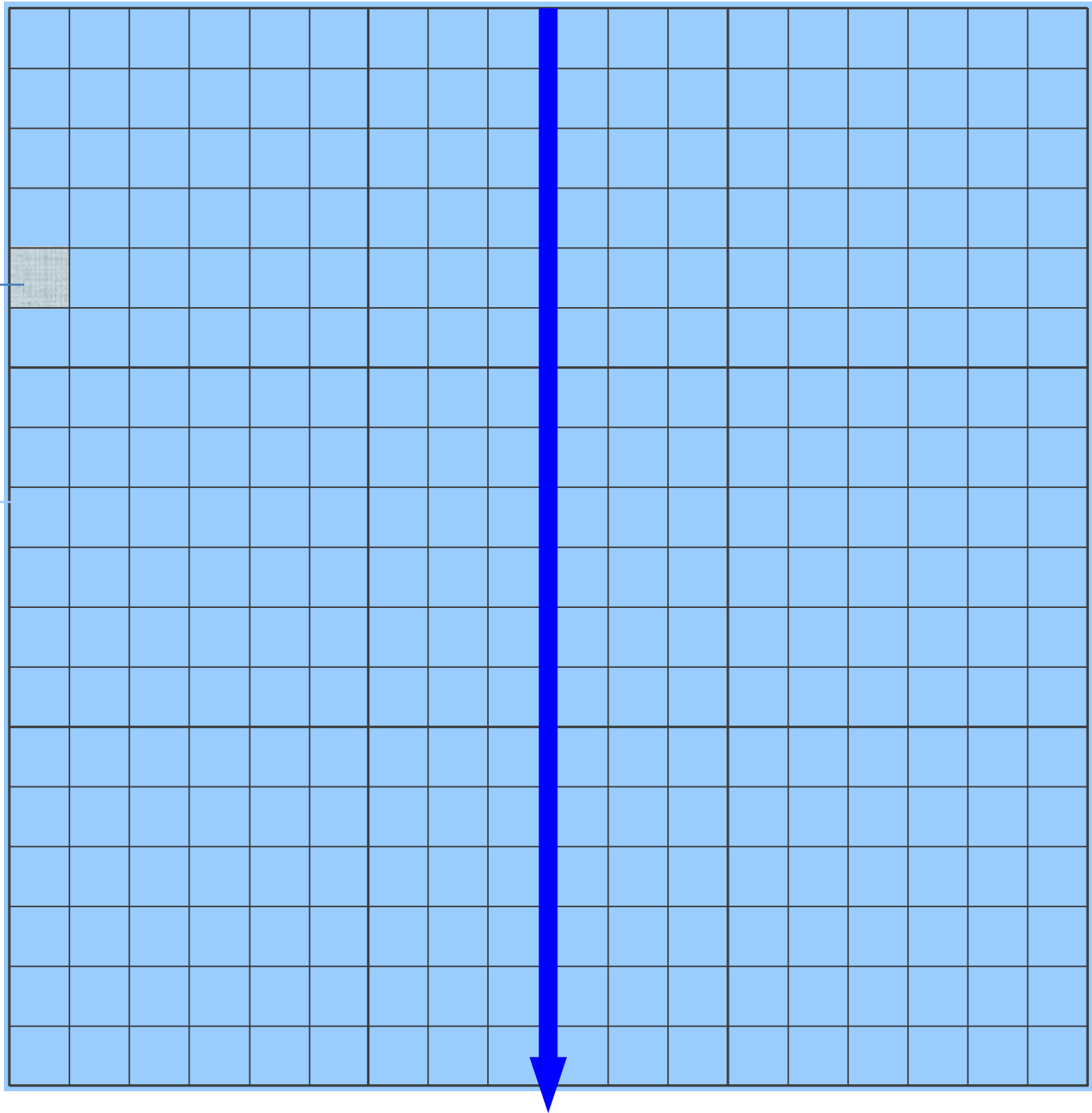
Each square receives a  
volume of 10,000 m<sup>3</sup> of  
water per year.

The map has 324 squares.

The map area's total  
annual water supply or  
*yield* is 3,240,000 m<sup>3</sup>.

Scale

1:10,000



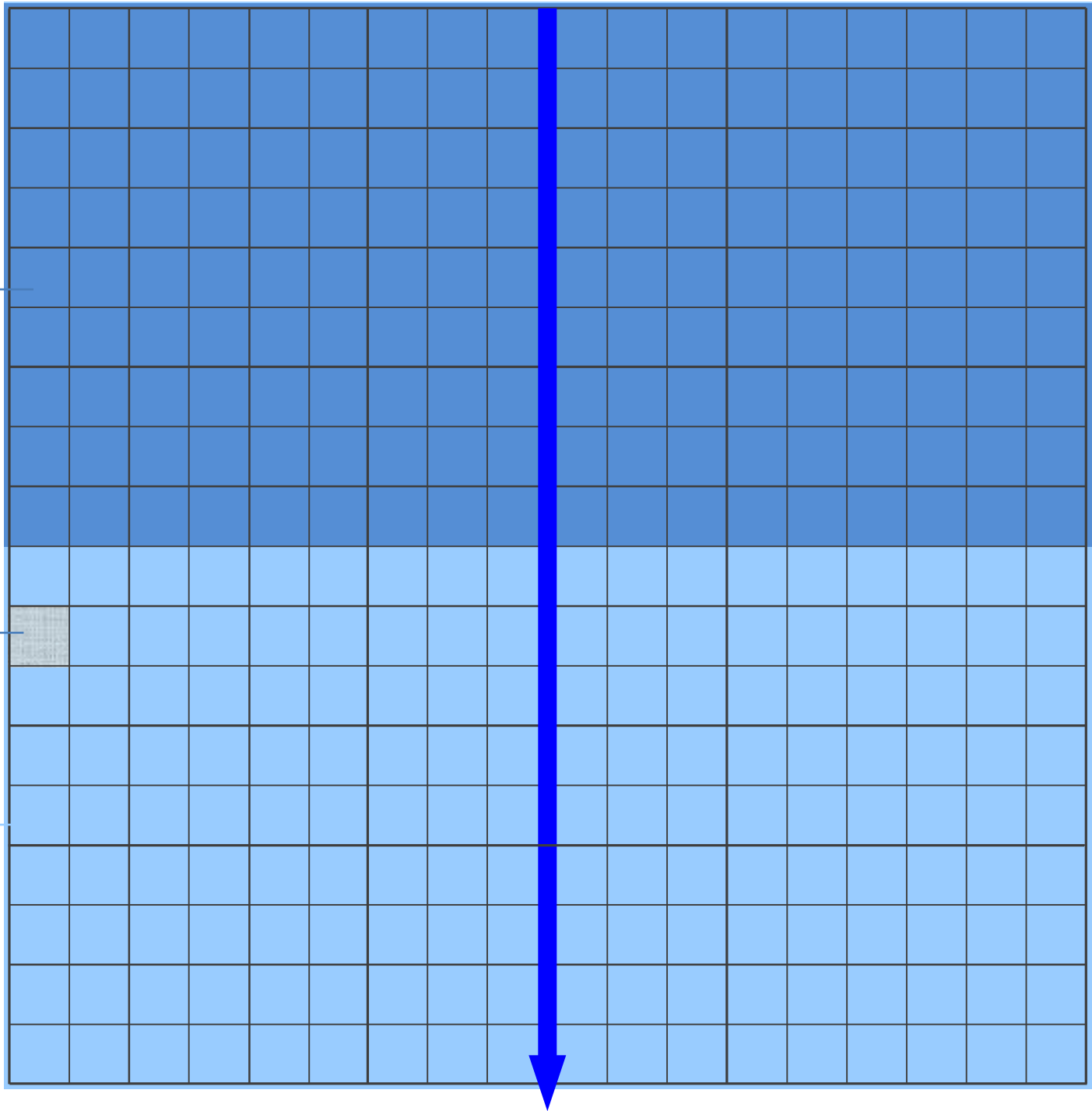
# Map 2

*Precipitation 2*  
2 m/yr falls on 162 squares,  
for a total yield of  
3,240,000 m<sup>3</sup>/yr of water.

1 square =  
1 x 1 cm =  
10,000 m<sup>2</sup>

*Precipitation 1*  
1 m/yr falls on 162 squares,  
for a total yield of  
1,620,000 m<sup>3</sup>/yr of water.

Scale  
1:10,000



# Map 3

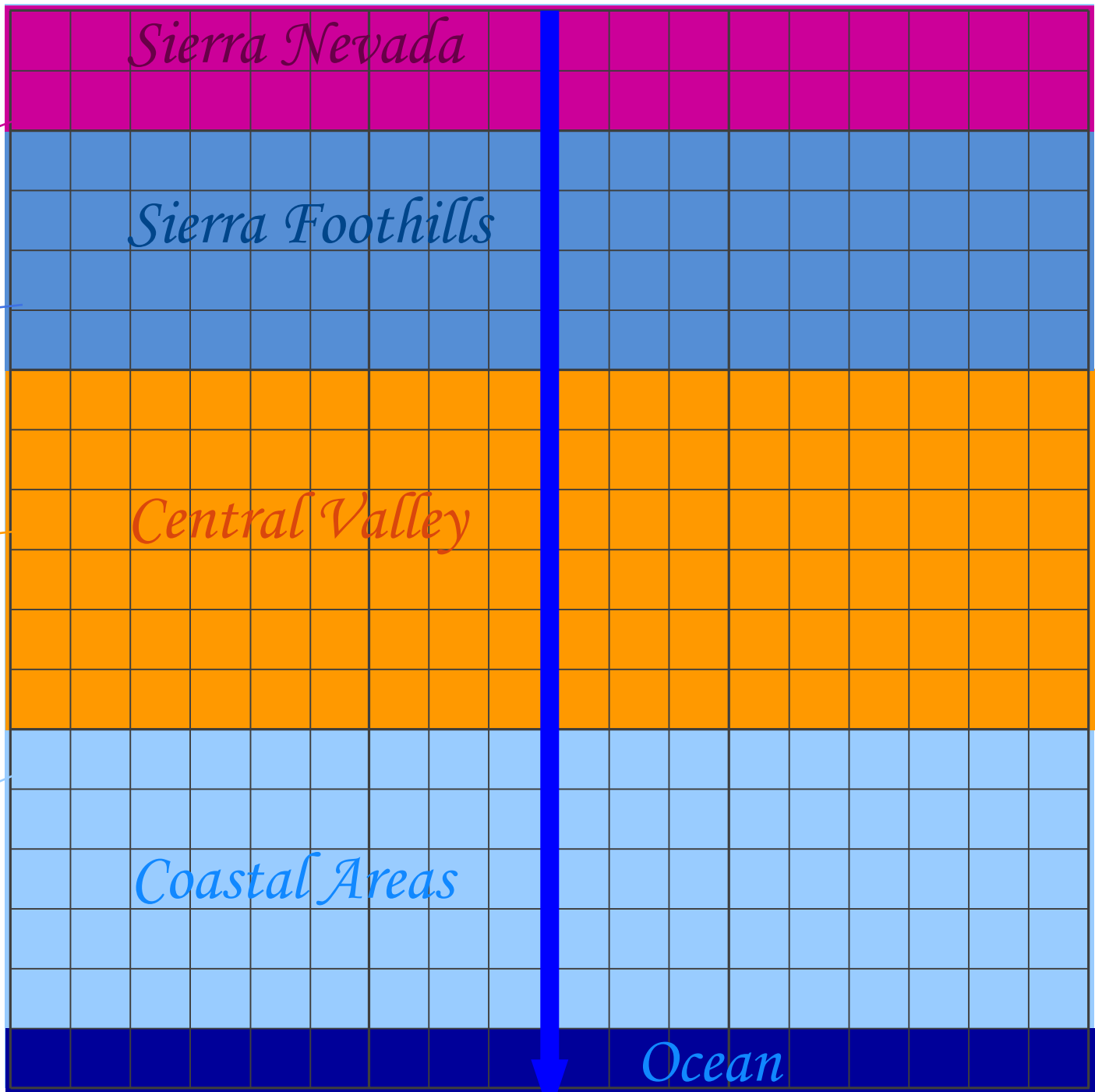
*Precipitation 4*  
3 m/yr falls on 36 squares,  
for a total yield of  
1,080,000 m<sup>3</sup>/yr of water.

*Precipitation 2*  
2 m/yr falls on 72 squares,  
for a total yield of  
1,440,000 m<sup>3</sup>/yr of water.

*Precipitation 3*  
0.25 m/yr falls on 108 squares,  
for a total yield of  
270,000 m<sup>3</sup>/yr of water.

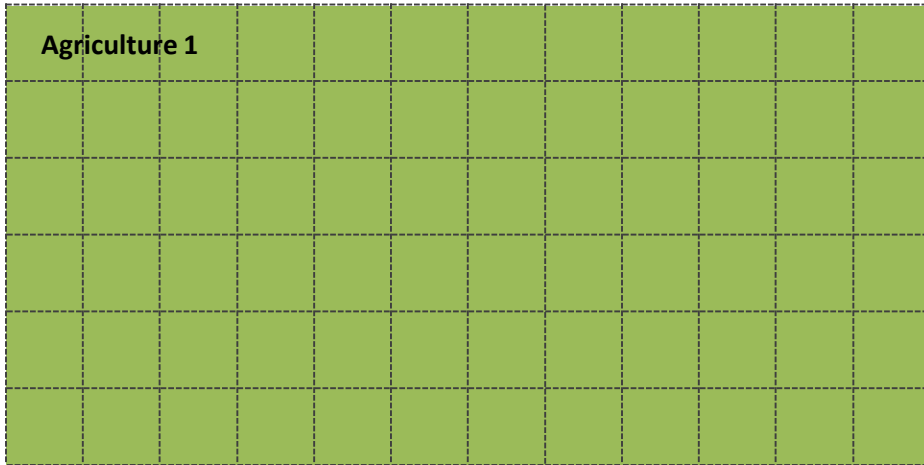
*Precipitation 1*  
1 m/yr falls on 90 squares,  
for a total yield of  
900,000 m<sup>3</sup>/yr of water.

Scale  
1:10,000



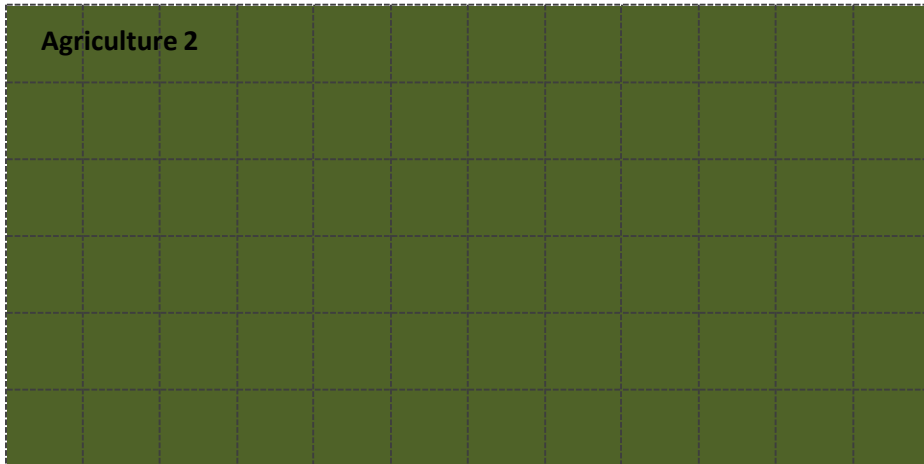
# Land Use & Water Demand Allocations

To assign land uses and water demands to the map, use **colored pencils or these cut-out pieces.**



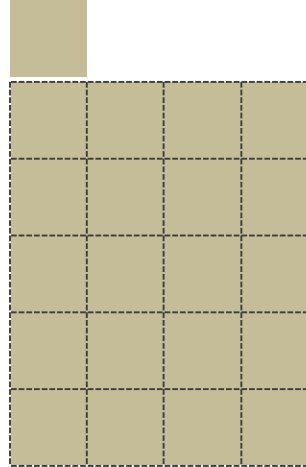
**Agriculture 1**

Each Ag1 block produces food for 6 people



**Agriculture 2**

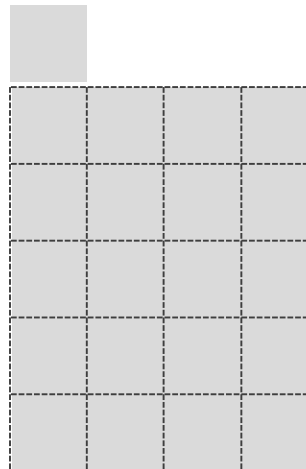
Each Ag2 block produces food for 18 people



**Residential Use**

Each residential block provides homes for 80 people

*(To provide all food locally, you would need ~13 Ag1 units or 8 Ag2 units for each residential block)*



**Commercial Use**

Each commercial block provides jobs for 100 people

Scale  
1:10,000