

## Supplementary Materials

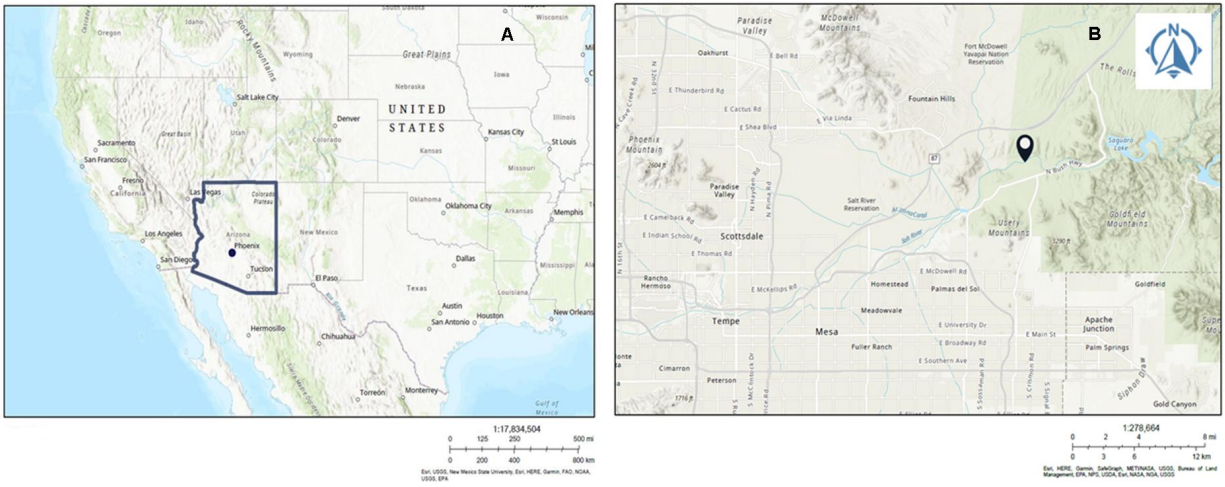
### **Recreational activities as a major source of microplastics in aquatic environments**

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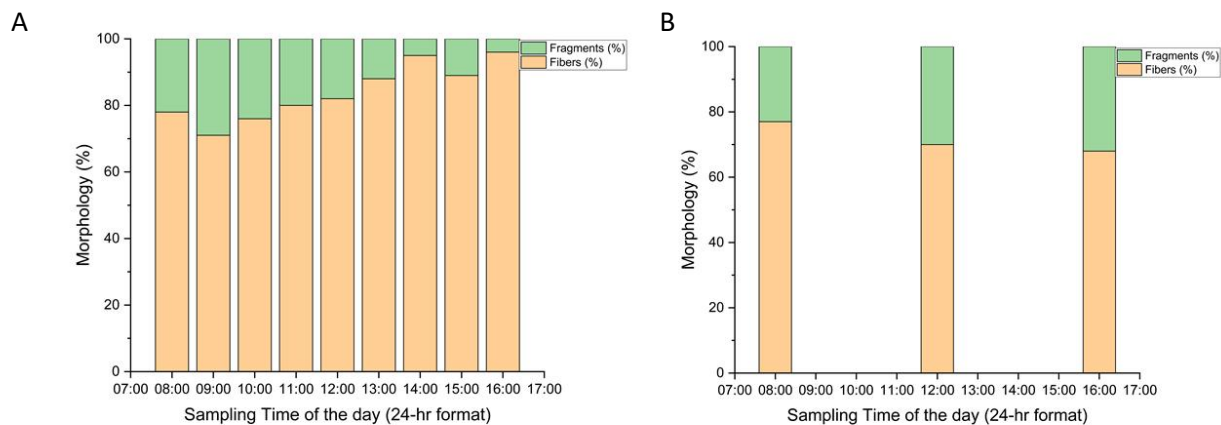
**Supplementary Figure 1.** (A) Arizona, USA (B) Sampling location of Salt River, Arizona.



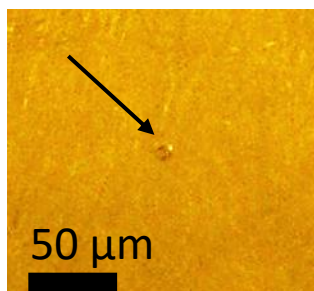
**Supplementary Figure 2.** Sampling locations of Swimming pools in Tempe, AZ.

**Supplementary Table 1. Table of surface water microplastic concentrations in the Salt River, AZ**

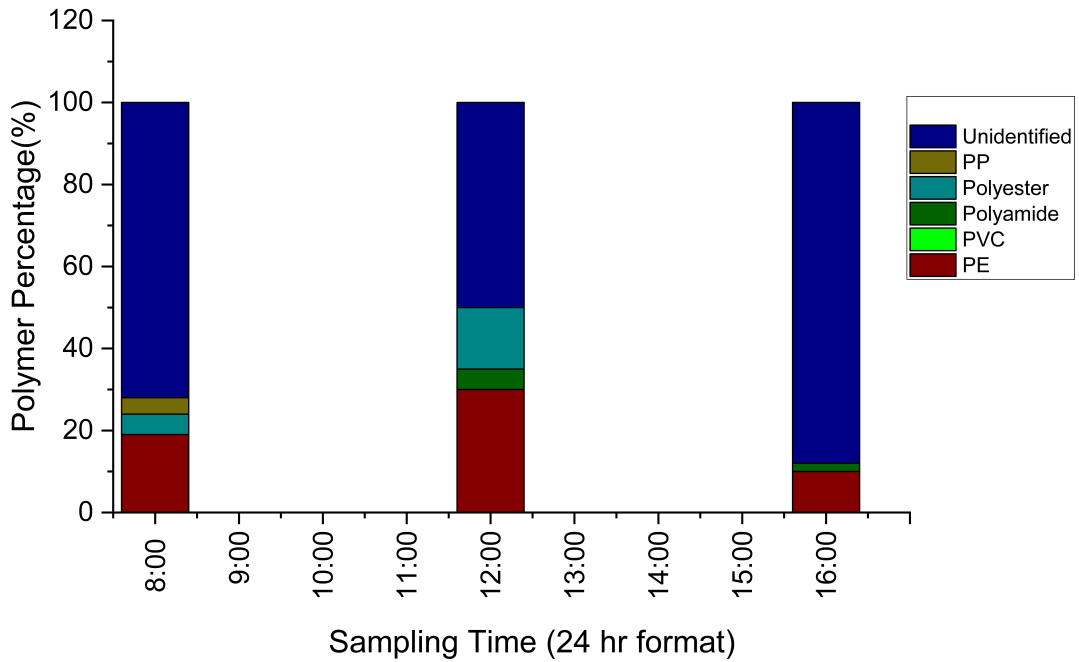
<b>Salt River, Arizona (July)</b>						
Sampling Time (24-hr format)	Replicate 1 (MPs/m <sup>3</sup> )	Replicate 2 (MPs/m <sup>3</sup> )	Replicate 3 (MPs/m <sup>3</sup> )	Average (MPs/m <sup>3</sup> )	Standard deviation of the mean	No. of MPs counted
8:00	29,580	32,457	21,356	27,798	5,574	28
9:00	46,013					46
10:00	54,127					54
11:00	60,004					60
12:00	69,922	62,027	71,439	67,796	4,746	68
13:00	98,006					98
14:00	123,219					123
15:00	144,810					145
16:00	227,923	210,188	229,063	222,391	9,572	221
<b>Salt River, Arizona (October)</b>						
Sampling Time (24-hr format)	Replicate 1 (MPs/m <sup>3</sup> )	Replicate 2 (MPs/m <sup>3</sup> )	Replicate 3 (MPs/m <sup>3</sup> )	Average (MPs/m <sup>3</sup> )	Standard deviation of the mean	No. of MPs counted
8:00	19,791					19
12:00	21,905					23
16:00	17,347					17



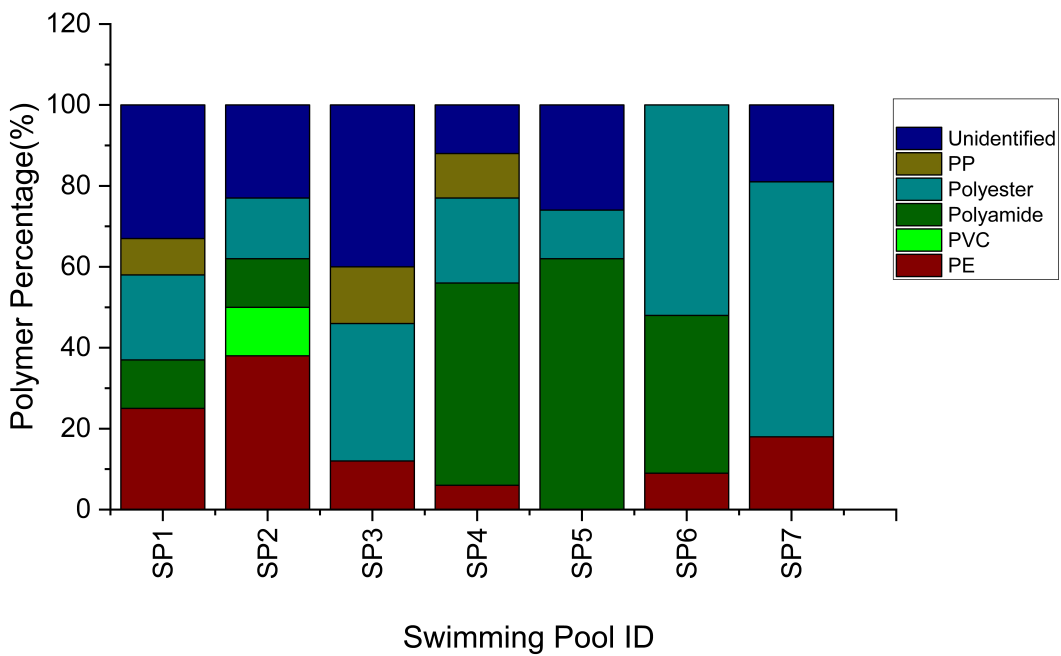
**Supplementary Figure 3.** (A) Morphology of microplastics in hourly samples collected at the Salt River, AZ (July); (B) Morphology of microplastics in hourly samples collected at the Salt River, AZ (October).



**Supplementary Figure 4.** Transparent spherical bead found in a swimming pool water sample.



**Supplementary Figure 5.** Raman Characterization of microplastics in the Salt River, AZ in October.



**Supplementary Figure 6.** Raman Characterization of microplastics in swimming pools in Tempe, AZ.