```
import matplotlib.pyplot as plt
import numpy as np

population_density = np.array([1000, 3000, 5000, 7000, 9000])

green_space = np.array([5.0, 3.5, 2.5, 1.8, 1.0])
required_green_space = (9 * population_density) / 1_000_000

plt.figure(figsize=(8, 5))
plt.plot(population_density, green_space, label="Current Green Space", marker='o')
plt.plot(population_density, required_green_space, label="Required Green Space", marker='x')
plt.title("Green Space Needs vs Population Density")
plt.xlabel("Population Density (people/sq km)")
plt.ylabel("Green Space (sq km)")
plt.legend()
plt.grid(True)

# Save the plot image
output_plot_path = "/mnt/data/Green_Space_Prediction.png"
plt.savefig(output_plot_path)
```