



STAFF REPORT TO COMMISSION

MEETING TYPE & DATE: Cowichan South Recreation Commission of November 25, 2025
FROM: - South Cowichan Recreation
SUBJECT: KPRC – Sand vs Soil Field Comparison
FILE: 5920-01 2025

PURPOSE/INTRODUCTION

The purpose of this report is to evaluate the advantages and disadvantages of sand-based and soil-based playing fields to inform future decisions regarding maintenance, watering and upgrades within the Kerry Park Recreation Centre (KPRC) Sports Field Complex.

RECOMMENDED RESOLUTION

For information.

BACKGROUND

On October 7, 2025, the Cowichan South Recreation Commission (CSRC) directed staff to provide a report on the differences between sand-based and soil-based fields and the overall general water consumption for each field type. Given the challenges experienced with the current well and irrigation systems used for the existing sand-based fields, the Commission felt it would be beneficial to compare the two.

ANALYSIS

The choice between sand-based and soil-based fields significantly impacts usability, maintenance, and long-term sustainability. The chart below outlines the key differences between the two field types:

Criteria	Sand-Based Fields	Soil-Based Fields
Drainage	Excellent drainage; playable shortly after rain	Poor drainage; prone to waterlogging
Playability	Consistent surface; fewer cancellations due to weather	Variable surface; more prone to unevenness and closures
Maintenance	Requires specialized care (e.g., aeration, topdressing)	Easier to maintain with standard equipment
Cost	Higher initial construction and maintenance costs	Lower initial cost; less expensive to maintain
Durability	Withstands heavy use better; less compaction	Susceptible to wear and compaction under frequent use

Criteria	Sand-Based Fields	Soil-Based Fields
Environmental Impact	May require more irrigation and fertilization	More natural; better for biodiversity and soil health
Seasonal Performance	Performs well year-round	Performance varies with weather and season
Water Consumption	May utilize 30-50% higher consumption due to high evaporation and poor retention; average of 1.5” to 2” of water required, 3 to 5 times per week	Better retention so results in less frequent watering during high season; average of 1” to 1.5” of water required, 2 to 3 times per week

In 2024, approximately 37,478 litres (37.48 cubic metres) of water was used to irrigate the KPRC Sports Field Complex.

Given the wet climate on Vancouver Island, a sand-based field is more desirable as it offers better drainage and allows for continued use during the wet season. Switching to soil-based fields would most likely end up with waterlogging and soil compaction, resulting in the likelihood of increased cancelations during the Fall and Winter months.

OPTIONS

N/A

FINANCIAL CONSIDERATIONS

Converting the fields from a sand-based to a soil-based field would result in an estimated cost of \$600,000 to \$1,200,000 to remove existing sand, bring in suitable soil, regrade the surfaces, replant grass and replace drainage and irrigation systems. Timelines would be a minimum of 24 weeks before grass was established enough for play, resulting in a significant impact to current users.

Cost savings in water would be approximately \$7,000-\$10,000 annually based on current water supply agreement.

COMMUNICATIONS

N/A

STRATEGIC/BUSINESS PLAN CONSIDERATIONS

N/A



Submitted by: K. Liddle, Manager South Cowichan Recreation
 Concurrence: N. Pukesh, General Manager Community Services

Reviewed for form and content and approved for submission to the Committee:

Resolution:

Corporate Officer

Financial Considerations:

Chief Financial Officer
