



# Water Park Design

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*International Amusements*

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**For Mrs. Allen's Hudson Middle School 8<sup>th</sup> Graders**

# Primary Goals

- 1) Safety
- 2) Customer Satisfaction
- 3) Innovation and Ingenuity
- 4) Be Cashflow Positive
  - If you are able to do 1-3 successfully, this will come naturally.

# Importance of Layout in Waterparks

- **Control Crowds**
  - Branching networks
  - Multiple routes
  - Large walkways in critical areas
- **Enhance Safety**
  - Think about accessibility
- **Ease of Maintenance**
  - If the ride has to be repaired, can maintenance close it easily?
- **Keep Families Together**



# Key Park Elements

How they're placed and designed



# Help Center

- **Function**
  - Assist guests in anything they need
    - Disabled guests
    - General park information
    - Will-Call Tickets
    - Lost Children
- **Placement**
  - Outside of park and inside of park
  - Two sided building recommended
  - Guests need to be able to access both before entering and while inside the park



# Disney's Blizzard Beach

Disney's Winter Summerland Miniature Golf  
See reverse side for more information.

Complimentary Wi-Fi  
Complimentary Guest Wi-Fi is available in most Guest areas.

Buses to Disney Resort hotels

Entrance

Entrance to Green Slopes

Entrance to Red Slope

Entrance to Purple Slopes

**2) Wave Pool**

[http://cdn.wdwmagic.com/imgstore/ElementGallery/temsother/Fullsize/Maps\\_Full\\_24517.jpg](http://cdn.wdwmagic.com/imgstore/ElementGallery/temsother/Fullsize/Maps_Full_24517.jpg)



# Wave Pool

- **Function**
  - Focal point of park
  - Large area with lots of seating
  - Meet-up area
- **Placement**
  - Centrally located close to attraction exits
  - Multiple paths to this area
- **Design Considerations**
  - Wave height
  - Wave pool shape
  - Wave pool depth
  - Slope to wave pool depth
    - $Y = -mx (b = 0)$







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**3) Water Slides**

[http://cdn.wdwmagic.com/imgstore/ElementGallery/temsother/Fullsize/Maps\\_Full\\_24517.jpg](http://cdn.wdwmagic.com/imgstore/ElementGallery/temsother/Fullsize/Maps_Full_24517.jpg)

# Water Slides

- **Function**
  - Main park attractions
  - Ensure all ages are accommodated
  - Safe but exciting thrills that are unique
- **Placement**
  - Try and space out to control crowds
  - Make sure people walk out to ride and slide back
- **Design Considerations**
  - Cost
  - Height
  - Target Audience
  - Slope
  - Accessibility



# Types of Waterslides



- **Water Coasters**

- **Cost:** \$1 million for magnetic, \$5+ million for tracked
- **Height:** 60' max for magnetic, 200+' for tracked
- **Target Audience:** 10 year old and up (42"+)
- **Accessibility:** Enter at outskirts of park; exit nearby
- **Design Considerations:**
  - How intense do you want it? Steeper slope = more intense
  - Is this ride the focal point of the park? Taller = more centrally located



# Body Slides



- **Body Slides**

- **Cost:** \$100,000+
- **Height:** Anywhere from 0-120'
- **Target Audience:** 7 years old and up
- **Accessibility:** Enter at outskirts of park; exit closer to center
- **Design Considerations:**
  - How intense do you want it? Steeper slope = more intense
  - Do I have a good mix of rides for all ages?



# Tube Slides



- **Tube Slides**

- **Cost:** \$100,000+
- **Height:** Anywhere from 0-80'
- **Target Audience:** 7 years old and up
- **Accessibility:** Enter at outskirts of park; exit closer to center
- **Design Considerations:**
  - How intense do you want it? Steeper slope = more intense
  - Are the tubes easily accessed?
  - Are the tubes heavy? Do I need a lift?



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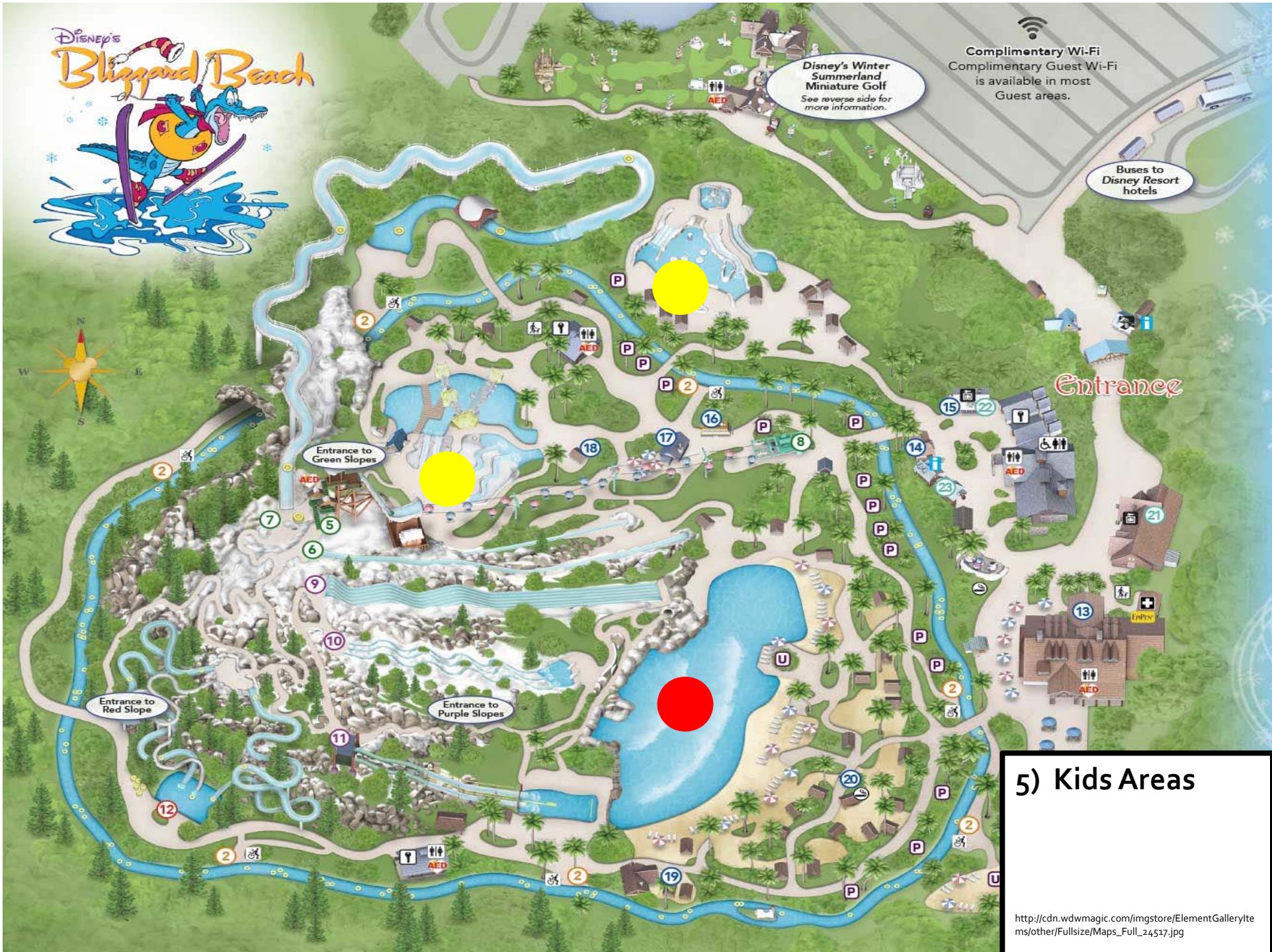
**4) Lazy River**

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# Lazy River

- **Function**
  - Allow multiple guests to enjoy the water
  - Can have high speed/low speed branches
  - Transport guests around the park to major attractions
- **Placement**
  - Try to keep the river going around the park
  - Have multiple entrances and exits (but not too many)!
- **Design Considerations**
  - Length
  - Capacity
  - Width
  - Accessibility
  - Theming





**5) Kids Areas**

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# Kids Areas

- **Function**
  - Provide an area for young kids to play in without being disturbed
  - Family-friendly area
- **Placement**
  - Close to central point of park, but isolated from older-age attractions
- **Design Considerations**
  - Age group! How tall and long can the slides be?
    - Also, water depth
  - Ability for all ages to enjoy (young kids area and kids area)



# Disney's Blizzard Beach



**5) Concessions,  
Gifts, Restrooms,  
Security**

# Concessions Gifts Security Restrooms

- **Functions**
  - Provide an assortment of foods and gifts
  - Lost-and-found points
  - Ensure proper changing booths and easy accessibility for guests using the restrooms
- **Placement**
  - **Gifts** – close to beginning of the park
    - No one wants to carry souvenirs around the waterpark
    - Sunscreen can be sold throughout
  - **Food** – close to meeting areas and front gate
    - Adequate seating!
  - **Security** – at front of park
    - Prevent issues/monitor incoming and outgoing guests
    - Lost-and-found
  - **Restrooms** – at convenient areas
    - Front gate
    - Kiddie areas
    - Exits of rides
    - Near eating areas



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## 6) Pathways

# Pathways

- **Functions**
  - Ease of access around the park
  - No dead ends!
  - Multiple paths to get to places
- **Design Requirements**
  - “Branching” system
  - Wide paths near front of the park where crowds are high
  - Interconnect all areas of the park

# Your Guide to FUN at Six Flags Over Texas!

Due to Texas' unpredictable weather, rain and thunderstorms can occur regularly. In the event of inclement weather in close proximity to the park, some, or all of our rides will temporarily close until they can safely reopen. We recommend you use this time to visit a great show, one of our many gift shops or enjoy a meal at one of our many restaurants. We are sorry, no refunds or rainchecks.



- NORTH AMERICAN PARKS**  
 Six - Buffalo - Chicago - Cleveland - Columbus - Concord - Dallas - Denver  
 Dorney - Lake George - Las Vegas - Louisville - Mexico City - Montreal  
 in England - New Jersey - New Orleans - Oklahoma City - Sacramento  
 - San Antonio - San Francisco - Seattle - St. Louis - Washington, D.C.
- EUROPEAN PARKS**  
 - Amsterdam, Holland - Brno, Czech Republic - Düsseldorf, Germany  
 - Lijn, France - Madrid, Spain - Paris, France - Toulouse-Bardouan, France
- FLAGS THEME PARK - 100 PLACE WATER PARK - MEMBER OF THE SIX FLAGS FAMILY



KENNELS & COOLER STORAGE LOCATED AT GAS STATION



## MAP LEGEND



# Six Flags® OVER TEXAS



**ALL SEASON DINING PASS LOCATIONS ARE LISTED IN RED.**



**LESS WAITING. MORE SCREAMING!**  
REDUCE YOUR WAIT TIME UP TO 90%.  
GET THE FLASH PASS TODAY!\*

\*Subject to ride availability

**? DID YOU FORGET SOMETHING?**

Cameras, sunscreen, aspirin, and other essentials are located in all major stores and on most merchandise carts.

**SNACKS, TREATS AND DRINK REFILL STATIONS.**

Find refill stations as well as jumbo pretzels, fresh popped popcorn, ice cream treats, and ice cold drinks on carts and in snack locations throughout the park.

**HEALTHY/MEAL OPTIONS.**

Six Flags Over Texas offers a variety of healthy meal options including salads, vitamin water, bottled water, and fresh additions throughout the year.



Proud Partner



Kennels and Cooler Storage

## MAP KEY

- First Aid
- Restrooms
- Handicap Accessible
- ATM
- Lockers
- Guest Relations
- Kennels
- Baby Care/Lost Parents
- Strollers/Wheelchairs
- Security/Lost and Found
- Designated Smoking Area
- Package Pick Up
- Healthy Meal Option
- THE FLASH Pass Sales
- Single Rider

## THEATRES

- 1 Music Mill Amphitheatre
- 2 Lone Star Theatre ❖
- 3 The Backporch Stage
- 4 The David Blackburn Southern Palace ❖
- 6 The Courthouse Stage
- 6 The Crazy Horse Saloon ❖
- 7 The Silver Star Carousel Stage
- 8 The Majestic Theatre ❖

Questions?

